Dr. Stammberger - Direct & Cross (except MW)

IN THE CIRCUIT COURT FOR THE 11TH JUDICIAL CIRCUIT IN AND FOR DADE COUNTY, FLORIDA

GENERAL JURISDICTION DIVISION

Case No. 00-01706 CA 22

LYNN FRENCH,

Plaintiff,

vs.

PHILIP MORRIS INCORPORATED, ("PHILIP MORRIS U.S.A.") R.J. REYNOLDS TOBACCO COMPANY, LORILLARD TOBACCO CO., and BROWN & WILLIAMSON TOBACCO CORP., Individually and as Successor to the AMERICAN TOBACCO COMPANY,

Defendants.

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PROCEEDINGS BEFORE
THE HONORABLE FREDRICKA SMITH
VOLUME 16
Friday, June 14, 2002
2:00 p.m. to 6:05 p.m.

73 West Flagler Street
Courtroom 6-2
Miami, Florida 33130

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THE COURT: Please be seated.

MR. WEINSTEIN: Judge, most respectfully, judge. I am advised that Dr. Teaf made the statement that, and this is very damaging and incorrect, I believe. He volunteered either on a question or on cross examination that the conclusions reached in that report were that there were more complaints after the ban of sinusitis than before.

I have been looking at that report. I don't see any such conclusions.

THE COURT: I don't think he said that.

MR. WEINSTEIN: I hope he didn't. I've been looking for it.

MR. TROP: I think he said either there were the same amount or there was an increase in sinusitis.

THE COURT: Why don't you find out what he said.

MR. ENGRAM: Your Honor, the last question I asked: "And what was the prevalence of sinusitis after smoking was banned?" And there was an objection.

THE COURT: Okay. I know we still have the other issue about what Mr. Weinstein said and apparently I have a transcript. I think we'll have to postpone our discussion of this.

Did you see this?

MR. WEINSTEIN: No.

THE COURT: Okay. I'm looking.

This is page 68, line 21:

"Did you investigate the results of people's exposure to environmental smoke? That is, how many people the government estimates died from exposure to environmental tobacco smoke?

"Mr. Engram: Your Honor, that's not relevant, outside the scope of direct.

"Overruled. He's talking about the risk of ETS. I suppose that could be considered in that category.

"Witness: I have not focussed on the lethality, no, because it wasn't the nature of any of the cases that I looked at so far. This is a sinusitis case.

"Question: You've never read anything that talks about -- you never heard the statistic about something like --

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"Mr. Engram: Your Honor, can we have a sidebar?"

And I said: "I don't think you can make reference --"

MR. WEINSTEIN: Not there.

THE COURT: It is there. I mean, you did say how many people die from exposure to environmental tobacco smoke. I think that's the comment that Mr. Reilly --

MR. REILLY: That is part of what we objected to. And also there is a reference to 400,000, but it's not in that section that you have right there.

THE COURT: Did you find it? Because the Court Reporter couldn't find it.

MR. REILLY: I didn't look for it because you had made the -- denied the motion for mistrial. Do I want an admonishment to this jury? No. Because what can you say?

MR. WEINSTEIN: Judge, most respectfully, I think I can ask that witness overall by challenging his knowledge as a toxicologist of the number of people that die from environmental tobacco smoke and what the statistics are. He says he's a toxicologist

who amasses statistics and he didn't even answer.

THE COURT: What evidence is there that the government has estimated any people die from environmental tobacco smoke? Where do you even have the basis for that?

MR. WEINSTEIN: Do you think I would ask a question if I didn't see it written in any reports, judge?

THE COURT: I'm asking you, what is it?

MR. WEINSTEIN: I'll show it to you, judge.

THE COURT: Earlier you said that you didn't say environmental tobacco smoke, that you just said tobacco smoke.

MR. WEINSTEIN: I'll find it for you. It's estimated that environmental tobacco smoke, I think it's 3,000. It may be in this report, but I'd have to find it, judge.

THE COURT: What report is that?

MR. WEINSTEIN: Surgeon General's Report.

THE COURT: The 1986 report?

MR. WEINSTEIN: I didn't just pick it out of the blue, judge. I assure you.

MR. ENGRAM: Your Honor, the Surgeon

General's Report of 1986 certainly doesn't mention that there were any, anyone that died from exposure to ETS due to chronic sinusitis.

THE COURT: Well, then --

MR. TROP: The statistic is 3,000 died from lung cancer from ETS. And I understand that's a well known statistic.

MR. ENGRAM: You say it's a well known statistic on your Web site, but you can't show there's a study that has established that to be fact.

THE COURT: The government estimates that people -- how many people died?

MR. TROP: 3,000 from lung cancer from ETS alone.

MR. ENGRAM: I think it's incumbent on Mr. Weinstein to show the Court where he's getting that information.

MR. REILLY: It doesn't matter, Your Honor, whether or not 3,000 people -- clearly no one has tabulated 3,000 people dying from anything, nor 400,000 people. Whether they die from secondhand smoke from any cause whatsoever is totally irrelevant to this case and it's highly prejudicial. No probative

value to it in a sinusitis case. And it's highly prejudicial to a fair trial for these Defendants.

THE COURT: Let me say why I'll overrule the first part of the objection. I think this is what my thoughts were, that Dr. Teaf was testifying generally. I understood that there was no risk -- he wasn't testifying specifically about no risk to sinusitis. He said there was no risk, as far as I understood his testimony, no risk at all to anybody from environmental tobacco smoke given the percentages of the things that were in the air. I believe he's talking generally there was no risk.

MR. ENGRAM: If you look at the boards, he talks specifically about carbon monoxide and nicotine and the safe levels established of those two constituents of environmental tobacco smoke. And on that same chart it said that there was a no-risk level for sinusitis. I mean, he did testify about that, only in the context of sinusitis.

THE COURT: Okay, I understood his testimony to be more general.

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MR. WEINSTEIN: You see how deceptive that testimony was?
THE COURT: I think you asked him a general question about -- I'm quite sure that you asked him a final general question about whether there was any risk at all from environmental tobacco smoke. We can review his testimony, but my understanding is it was more general. And if it was more general, I'm not sure I agree that it's totally irrelevant for the plaintiff to ask about deaths from environmental tobacco smoke, because obviously that's a risk.
MR. ENGRAM: Your Honor, what I was referring to is carbon monoxide was one board, nicotine was the other board. He clearly testified that this was a no-effect level for sinusitis on both boards. That was the context of his testimony.
THE COURT: What was the last question you asked him?
(A discussion was held off the record.)
THE COURT: Anyway, if the Defendants are not asking for any instruction and there seems to be some questions about everything that was

said, I won't do anything right now. But we'll go on with the next witness.
MR. REILLY: Just for the record, Your Honor, I don't believe any instruction could resolve the problem. And I think an instruction will simply compound it. I don't know what you would say, you should ignore references to deaths due to smoking and you should ignore references to 400,000 people?
THE COURT: I don't know where the reference to 400,000 was, it's not in the text that I have here.
MR. REILLY: I understand, Your Honor, that the Court Reporter may not have gotten the 400,000, because I understand the symbol that the Court Reporter put in indicated he didn't quite get the quote.
THE COURT: Anyway, let's proceed with Dr. Stammberger's video.
Bring in the jury.
(Jury enters courtroom.)
THE COURT: Okay, everyone have a seat. While the jury was in the jury room and we were having our discussion, it was determined that there would be no additional questions

for that witness. So instead of having you come back to hear that, I just excused you for lunch. But I excused the witness Dr. Teaf as well as the examination was completed.
So now we're going to proceed with the next witness for the Defendant. And I believe this will be by videotape.
Who will that be?
MR. REILLY: This will be Dr. Heinz Stammberger.
THE COURT: And who is going to operate the video machine?
MS. TEDDER: Well, I'm told if you push "play," it runs.
MR. REILLY: And if it doesn't -- this is like at my house.
(Videotape deposition of Heinz Stammberger, M.D. was played as follows:)
DIRECT EXAMINATION
"BY MR. REILLY:
Q. Dr. Stammberger, would you please introduce yourself to the jury?
A. I am Heinz Stammberger. I am a specialist of otolaryngology, head and neck surgery, and I am the chairman of the university

ENT department of the medical school at Graz in Austria.
Q. Doctor, where is Graz, Austria?
A. It's in the southeastern corner of Austria, about 200 kilometers south of Vienna.
Q. Doctor, when were you last in Graz?
A. Eight days ago.
Q. Where have you been in the last eight days since you left Graz?
A. I traveled to lecture first to France, Toulouse, where there was a large meeting of the French Society of Otolaryngology. From then back via Frankfurt to South America to Chile, where I was a guest of honor at their national ENT meeting in the south of Chile, and from Santiago de Chile I came up here to Miami.
Q. Doctor, in Toulouse in France, were you a speaker at that meeting?
A. Yes, I was.
Q. What were you speaking on?
A. Nasal polyposes, chronic rhinosinusitis, state of the art of this. I was talking about navigation-aided sinus surgery and I was talking on classification of fungal diseases of the nose and the sinuses.

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Q. When you were in Chile, you said you were the honorary guest speaker?
A. That's correct.
Q. What were you talking about at that conference?
A. Again, my keynote lecture was state of the art in chronic rhinosinusitis as of 2001, and further other topics, I was asked to give five workshops of 45 minutes each on a variety of topics that related to the sinuses, diagnosis, surgery, imaging, navigational surgery, extended applications, anterior skull-based surgery, endoscopic surgery that is.
Q. Doctor, before we get too far into this deposition, obviously you speak with a significant accent; is that correct?
A. I'm afraid this is correct, as English is not my native tongue.
Q. You were born in Austria?
A. I was born actually in Germany, but as an Austrian and German, I had dual citizenship for a while as my mother is a native Austrian and my father is from southern Bavaria.
Q. You have lived, currently live in Austria?

A. Yes. I am now a, since '97 -- 1976, I am a citizen of Austria. I had to give back one of those two citizenships because for some legal reasons it's not possible anymore to have two, so I opted for the Austrian, and since 1976 I am a citizen of Austria.
Q. Doctor, you are a medical doctor, correct?
A. I am a medical doctor.
Q. What is your medical specialty?
A. It's ear, nose and throat, head and neck surgery or otolaryngology as you might call it, and I'm basically covering the entire specialty in an active way still today, so I am involved not only in sinus, sinusitis, sinus surgery, which has become my main field of interest, but I'm doing oncologic diagnosis surgery of the head and neck, I am doing skull-based cases, ears, et cetera.
Q. Has a substantial portion of your medical career been devoted to the study and treatment of sinus disease?
A. Yes.
Q. You indicated you have just been speaking at two lectures or two seminars in two different countries in the last eight days. Are you a

frequent lecturer, requested lecturer at meetings of that sort around the world?
A. This is correct. I have basically lectured over the last 15, 16 years on all continents, in many of the major university cities and other major hospitals on those sinus-related topics.
Q. Doctor, have I asked you to come here today and share with this jury your opinions regarding sinusitis, what it is, what causes it and whether or not environmental tobacco smoke is a cause or a substantial contributing factor to sinusitis?
A. This is correct.
Q. Doctor, let's start with your medical educational background. Can you tell this jury where you went to medical school?
A. I went to medical school at Graz in Austria and I did so from 1967 until 1973, when I finished with the degree of doctor of universal medicine, which is the title you receive in our country.
Q. Did you do an internship after medical school?
A. Yes, I did. I went for two years to a

county hospital in another part of Austria, where I rotated through various departments and specialties, such as gynecology, emergency medicine, pediatrics, general surgery, et cetera.
Q. Where did you do your internship?
A. The name of the town is Villach and it's in southern Austria.
Q. Were the years of your internship 1974 and '5?
A. Correct.
Q. Can you tell me, after you completed your internship, did you continue your medical education?
A. Yes. I then started at Graz at the ENT department a specialty training in ENT, head and neck surgery.
Q. ENT, that stands for ear, nose and throat; is that correct?
A. Correct, yes.
Q. How long was your specialized training in diseases and treatment of the ear, nose and throat or otolaryngology?
A. I received my specialists degree in 1980.
Q. How long is the specialist training program, five years?

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A. It's six. Actually, four and a half of which must be spent at an ENT department, which is entitled to train you for this period, and one and a half years one usually spends at related specialties, pediatrics, general surgery, those that are considered to be important to round the training that you need as a doctor.

Q. What did you do after completing your specialist training?

A. I became a senior staff member at the Graz ENT department of the university medical school and did a couple of subspecializations there. I ran the allergy subdepartment that our ENT hospital had for a couple of years. I got involved in pathohistology, received a special training there as it was habit then that we had a histopathological laboratory at the ENT department where we would do and investigate all our histological samples from biopsies, operations, et cetera, with the exceptions of malignant lymphoma, and I did this for a couple of years.

Q. Have you ultimately become a professor at medical school?

A. This is correct and this was in 1988.

Q. Are you a professor in medical school in

any particular specialty?

A. The title is professor of otolaryngology, head and neck surgery.

Q. So the jury understands what otolaryngology stands for, can you explain that?

A. This is ear, nose and throat.

Q. Oto means?

A. The ear, rhino is the nose, rhinology is the science dealing with diseases of the nose and the sinuses, and the throat is larynx, hypopharynx region, neck is the associated soft tissues that frequently are involved in the diseases there.

Q. Can you tell us generally what kinds of diseases an otolaryngologist deals with and what kind of medical techniques they employ to deal with those disease processes? I realize that's a big undertaking, but if you could give us a concise understanding.

A. Yes, I will try to be precise and short on that.

Of course, it implies examination, investigation, all the audiological testings of the ear, hearing disorders, inflammation, tumors of the ear and the related environment. This includes vestibular disorders of the order of equilibrium,

of balance.

This includes diseases of the nose, inflammatory, infectious, tumorous diseases. This includes trauma of the entire field of the nose, the sinuses, anterior skull-based, ears and of course the head and neck region.

It includes diagnosing and treating, medically and surgically, again, inflammatory infectious diseases, trauma, malignant tumors of all of the mouth, the tongue, base of the tongue, the pharynx.

As far as the esophagus, this may vary from country to country, but in our system it is that foreign body removal, treatment of enlarged veins, et cetera, in the esophagus is done by the otolaryngologist as well, and this applies for diseases of the upper -- of the lower airways of the upper part of the trachea as well. So foreign bodies, tumors, stenosis, this is what we would treat there as well.

And of course it requires, in an academic position or in a leading position in the hospital, that you cooperate with the neighboring specialties: Neurosurgery, the department of interventional radiology, internal medicine,

pediatrics and a couple of more.

Q. Doctor, we talked about your being a professor of medicine. Can you tell the jury what subjects you teach as a professor?

A. Basically to the students, I have to communicate the textbooks, what's in the textbooks of otolaryngology. So basically many of the topics that I have referred to just a minute ago.

Above that, I do teach postgraduates, doctors at variety of levels, and there my specialty is things that relate to nose, sinuses, sinusitis, tumors, in this region.

Q. We will talk about your lecturing in just a little bit, but I would like to turn now to your medical practice.

A. Okay.

Q. You take care of patients?

A. I do.

Q. Can you tell this jury where you take care of patients?

A. At the ENT department of the university medical school at Graz in Austria, at the department where I work.

Q. Where are you licensed to practice medicine? That may be an American term. What

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countries can you practice medicine in?
A. Basically with Austria being a member of the European Union, I'm entitled or my qualification entitles me to practice in all of the European Union.
Above that, however, I have practiced and I was asked to go there and operate on patients in many countries, including, well, I have been operating in Canada. I have been in Middle East countries. I did surgery in London, at the University College. I did this in Edinburgh, I did this in Australia, and I'm sure there have been some more, but basically the license that I hold entitles me to practice medicine almost anywhere in my specialized field, but that might well require some special permits if I am invited to a country.
Like I remember, for instance, with Australia, when I was asked to operate, to see and operate on patients there, they had to get a temporary permit for me to do this. Or was it just insurance? It's too long ago to precisely recall.
Q. Doctor, do patients come to you from around the world to your facility in Graz?
A. They do, yes.
Q. I think you indicated you have seen

patients around the world when you have been asked to visit and take care of patients; is that correct?
A. Yes, that's true.
Q. Do you perform sinus surgery?
A. I do. This is one of my major tasks and timewise this is what I devote most of my time to.
Q. Can you tell the jury about how many sinus surgeries you have performed in your career?
A. I can't give you a precise figure, because I have stopped counting the individual cases a while ago, but I know that at some stage some years ago I have reached above 7,500 patients. That's not sides of the sinuses, patients whom I personally have operated on.
Q. Doctor, are most of those surgeries performed at your hospital in Graz?
A. Yes.
Q. You have indicated you have performed surgeries elsewhere in the world?
A. I did.
Q. Is that by invitation?
A. Yes. Exclusively. By invitation.
Q. Do you have administrative responsibilities in addition to your teaching and

patient care responsibilities at your hospital in Graz?
A. Yes, I do. I am the chairman -- I am the chairman now since more or less exactly two years. Before that I was heading for many years the subdepartment of general otolaryngology, head and neck surgery, and I had to do all the administrative work there. I have to take care of the residents and acquiring funds, everything of this nasty administration that is involved in such a position.
Q. Doctor, we have talked a bit about your responsibilities as a professor there in Graz. Have you been a visiting professor at other medical schools around the world?
A. I have been a visiting professor to, I dare to say, universities around the world.
Q. I am not asking you to give us an entire list, but can you give the jury a sense of just going around the continents around the world where you have been a visiting professor of medicine?
A. Well, if I start in Europe and leave away the German-speaking countries, but I have been to London several times, University College of London.
I have been at the Royal Society of

Medicine. I have been at Edinburgh. I have been to Ireland. I have been to Paris, Toulouse, Lyon.
I have been to Universities of Rome, of Milano, of Sienna, of Brescia. I have been to Istanbul, to Cairo.
I have been to many of the Eastern countries. I have been among the first to lecture on that in Russia, then still USSR. I have been to the Near East. I have been to the Far East, Singapore, Hong Kong, Prince of Wales Hospital.
I mentioned Australia, where I was invited to do surgery, surgical demonstrations that is, in Brisbane, Sydney and Melbourne.
I mentioned Singapore, Malaysia, India. I did surgery in India.
As well I have been to Canada, I have been to the United States, I have been to South America. Many universities, but I can't give all the individual names of these.
Q. Can you give this Florida jury a sense of some of the sites you have been a visiting professor to here in the United States?
A. This is an ongoing process since 1985, when the first courses on this topic started here in the United States, and I have been to Yale. I

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have been to Harvard. I have been to Rochester. I have been to Johns Hopkins at Baltimore several times. I have been to Penn University, Philadelphia. I have been to St. Louis. I have been to Washington.

I have been lecturing in UCLA, Los Angeles. I have been to New York, Sacramento. I apologize if I jump. I have been to Orlando. I have been to many places. I think in the United States alone I must have been at some 25, 30 FESS courses, which usually would be three-day, full day courses talking on chronic rhinosinusitis, acute sinusitis, endoscopic diagnosis, surgery, medical treatment over all of these years.

Q. Doctor, you used the term FESS?

A. Yes.

Q. That's FESS?

A. Correct.

Q. What does that stand for?

A. That stands for Functional Endoscopic Sinus Surgery and this is the technique that developed or resulted from the advent of the endoscopes, which allowed for the first time to look into the nose and to some degree the sinuses without being invasive in the sense of traumatic,

and which have changed our ideas on sinus disease and therapy of sinus diseases starting in the late 70's or mid 70's to the mid 80's.

Q. Doctor, I am going to get into your work in endoscopic examination and surgery in just a little bit, but before I do that, I would like to talk a little bit with you about your research and your writing. Have you been involved in medical research in your career?

A. Yes, I have.

MR. REILLY: Can I get this marked?

(Defendant's Exhibit 1 was marked for identification.)

Q. Doctor, I am going to hand you what's been marked Defendant's Exhibit No. 1 and ask you if that is a listing of your academic research publications, posters, presentations, lectures, et cetera?

A. This is correct. It is an incomplete list though, but the major publications have been -- are in there, that's right.

Q. Can you explain to the jury what basic areas of medicine your research has been about?

A. The major portion is and was dedicated to sinus diseases, sinusitis, chronic rhinosinusitis

and the development of diagnostic and surgical therapeutic approaches to those diseases, but I have as well published on tumors of the sinus system. I have published on special ear problems. But in the last decade, I would say, or even last 15 years, predominantly research and publications dealt with sinuses and the diseases thereof.

Q. Doctor, have you written any books relating to sinus disease, sinus surgery?

A. I have written two books where I am the sole or leading author. Actually I am the only author there, and I am co-author of a couple of more books, and I have contributed a number of chapters to standard textbooks, especially in the German-speaking countries.

Q. I am going to hand you a text called Functional Endoscopic Sinus Surgery and ask you if you could pick that up and display it for just a moment --

A. Okay.

Q. -- and ask you if that isn't a book that you authored on this topic.

A. This is a book that I authored on the topic of sinusitis and endoscopic techniques back in -- it was published in '91.

Q. That book is published in how many languages, do you know?

A. I don't exactly know, but it has been translated into several languages. It exists in German, it exists in Turkish. There is an issue out in Italian. It is in Spanish and there has been a second -- and oh, English, of course. It was initially written in English. And there was a follow-up edition three or four years later, which was called the Essentials of Functional Endoscopic Sinus Surgery, which is a smaller volume to that.

Q. Also published originally in English?

A. Originally in English, correct.

Q. Your publications include publications in peer reviewed journals as well; is that correct?

A. Yes, they do.

Q. Doctor, have you received any awards for your work in the area of otolaryngology?

A. Yes, I received several awards. Among them, I was -- I am the six time recipient of the award of our national Austrian society over the last years for the respective best scientific publication of that year.

I received awards from University of London, the Davie Howell prize. I received awards

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from the Royal Society of Medicine. I received awards at London. I received awards from the Royal College of Surgeons in Edinburgh and I received awards from the American Rhinologic Society and from the Spanish, from the Hungarian. There have been a number.

Q. The American award that you received from the American Rhinologic Society is called the Cottle Golden Head Mirror Award; is that correct?

A. Yes, this is correct.

Q. Cottle, I take it, is some gentleman's name?

A. It is some gentleman's name. He was a very famous U.S. American surgeon specializing on the nose and the sinuses. Primarily he was a rhinologist and I don't know since when, but there is a many years tradition with the American Rhinologic Society to award a prize, which is then called the Golden Head Mirror Award in the name of Cottle, to what the American society, the Rhinologic Society considers to be outstanding achievements in this field.

Q. For what did you receive the Cottle Golden Head Mirror Award?

A. For the development of the techniques of

endoscopic examination and treatment of diseases of the nose and the sinuses.

Q. Doctor, I would like to turn now for just a moment and ask you about your work in the area of endoscopic surgery. Was there a breakthrough or an advancement in the area of nasal surgery or sinus surgery which you were involved in?

A. Yes, I think this was the case. I had the luck to arrive or to start my training at Graz in 1975, exactly at a time when the chairman then, Professor Messerklinger, was just investigating the nose and trying to learn more about the normal and pathophysiology, and up to then there was no way to really look into the inside of the nose without doing some kind of surgery.

Messerklinger did his studies basically, the first studies on cadaveric specimen.

Q. Cadaver being dead bodies?

A. Dead bodies. Fresh corpses. That's important, because he discovered that under certain circumstances, the activity of the cilia, of those tiny hairs on the cells in the sinuses, survive the death of the individual for sometimes as much as 24 or even 48 hours.

They would be a little bit slower, but

their behavior, the direction of their beat, the mechanism would be the same as in the living person.

By this he was able to identify how the mucus is transported through the sinuses, out of the sinuses and through the nose. Up to then we very much had the idea that mucus would flow there at random, which now we know is not the case, and by a variety of staining methods, he was able to show that there are certain pathways the mucus transport takes.

When he wanted to confirm these findings in a living person, without having to do surgery or open their sinuses, he came across rigid endoscopes.

Q. Rigid?

A. Rigid. Which is in contrast to a flexible endoscope that you might be familiar with. For instance, if someone has his or her stomach investigated, they have these flexible elastic endoscopes.

Q. Doctor, I think we have an endoscope here.

A. A rigid endoscope has a steel shaft and glass lenses in it, and this would be such an

endoscope, which wasn't present then in the 60's when Messerklinger started to do that or in the 70's when I had a chance to follow it, but this is the type of nasal and sinus endoscope that resulted from this work and which are used, whatever the manufacturer may be, all over the world today.

They are sort of standardized. So these are rigid. They have a steel shaft and they have lenses through which the surgeon can look like this (indicating) and they have an entrance where light fibers go in and illuminate the area of vision.

By now these telescopes have various deflections at their tip, at the distal tip, which allows to look around the corner in a variety of degrees. This happens to be a 30 degree telescope. That would indicate that you are not looking in this direction, but 30 degrees up, which gives the advantage that if you rotate such an endoscope around its longitudinal axis, which the patient will not realize, you get a very nice area 360 degrees that you can inspect.

And this comes with 45 degrees, 70, 90 and even 120 degree, which is you can insert a rigid instrument into the nose and even look back.

Why rigid? When one would think of doing

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surgery, one would have had three hands if one would use flexible endoscopes: two to operate the flexible scope and one to guide any instrument or suction or swab for cultures or whatever.

So this is how the rigid scopes were preferred, which have, by the way, a much better visual quality, optical quality I should say, and so the surgeon or the investigator looks into the nose like that and guides whatever instrument he or she are using, suction, tips, alongside this telescope and thus take advantage of the flexibility of the nostril and this is how we reach now as far as skull base or even the pituitary.

But the big breakthrough was that for the first time one could see what is changed in the nose, what is going on and where things are going on and for the first time then could we, for instance, or could anyone, see the effect of their medical therapy, which up to then we had to relate to what the patients would tell us: Yes, I could feel better. You could believe that or not.

You could go for a general x-ray or not, but you couldn't really look in detail into the nose. This was possible with the help of the endoscopes.

Plus, of course, at the same time the development of computer tomography, CT that is, which nicely proved the first hypothetic, but then very clear findings behind the endoscopic concept.

Q. We will talk about CT scanning. That's a radiographic procedure; is that correct?

A. Yes.

Q. It's a form of visualizing through x-ray or it's not actually x-ray, but through imagery?

A. It is x-ray, and if you consider a standard x-ray of the sinuses, Walters view being the best known of those. Basically what you have is from the tip of the nose to here is condensed as a radiologic information on one plane of x-ray.

CT scanning implies that certain cuts are taken in various levels at various intervals, now standardized about 3 to 4 millimeter cuts, and each cut shows the 3 to 4 millimeters at the plane which it is taken.

So if you take the 15 or so individual cuts of a CT scan of the paranasal sinuses, you will have a very detailed information at every two or three millimeters in that field. This is the big difference to a plane #*x-ray.

Q. Doctor, I am going to ask you some

questions now that will elicit opinions from you and I would ask that any time you give an opinion, only give an opinion that you hold to a reasonable degree of medical probability or certainty if you would, please.

A. Okay.

Q. We have a number of diagrams, depictions and a model here. If at any time you would like to use any of those to assist you in informing the jury about any of the topics we are going to talk about, please feel free to do that.

A. Okay.

Q. First of all, can you tell us what the sinus system is in the human body?

A. This applies to anatomy or the purpose?

Q. Yes.

A. Anatomy?

Q. Please.

A. Well, the sinus system is a system of cavities in the bones of our face by and large and these cavities are lined with a mucosa and this mucosa being having a ciliated epithelium, which means that the layer towards the lumen of the sinuses has special cells which have cilia, which beat actively in a certain way and transport the

mucus, which is more or less constantly produced there.

Q. I am going to ask you, you have used a lot of technical terms in that explanation and I am going to take you through those one at a time.

A. Please.

Q. But on either this not all that attractive human head here or on the board that we have behind you, would you demonstrate to the jury how many sinuses there are or these cavities there are in the normal human being?

A. Let me try to use this model first. It's not a very accurate one and I have to separate this. You can see that up here in the frontal bone in our forehead there is an aerated space which would be the frontal sinus.

Then there is an aerated space inside the maxilla, which is the bone here of the upper jaw, and this has, I think, yes, a nice window here. This is very schematic over here.

And this, by the way, to give you an idea, has roughly the volume of a ping pong ball, 15, 20 milliliters, with individual variations.

These are pericavities. Usually you have one on either side of the head, and if you open

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this in the midline, you can see the inner nose with the nasal turbinates, the inferior turbinate, the middle and the superior. Sometimes there is a supreme turbinate. And the opening to those sinuses goes underneath the middle and the superior turbinate.

You see another sinus, which is the one that is "deepest in our head, the so-called sphenoid sinus, and this sinus is roughly there if you would enter with your fingers anterior to your ear canals and meet in the midline, which is about the center of the head as you can see here. This is the sphenoid sinus. It's about some 10 to 12, maybe 13 centimeters away from the entrance of the nose.

Something, however, which is the most important region, is not shown on this model because all of the sinuses I have just mentioned communicate.

Q. What do you mean by communicate?

A. Well, there is a communication because sinuses are normally filled with air and they constantly produce mucus. Few people would imagine that you produce over 24 hours as much as one litre of mucus in these sinuses.

It is a rough estimate. If any one of you takes his or her fist like this, this would roughly give you an idea of the volume we all have in our sinuses and the air cavities up there.

If I may move over to this chart where we have a depiction which would very much be what we would see on a coronal, on a frontal CT scan at a certain level. You would see the frontal sinus on either side, so there are two. You would see the so-called maxillary sinus. Then here you see the inner nose, and all these are separated by the nasal septum.

Q. What is the nasal septum, Doctor?

A. That's a piece of cartilage and further backbone which separates the two sides of the nose.

Q. When we touch our nose, is that that firm thing that seems to be the ridge of your nose?

A. Well, in the lower portion of the nose. If you would blow your nose and clean it, the piece that you can move right here between the flexible parts, that's the septum. Up here you can't feel it because there you have solid bone over the dorsum of the nose.

But this septum goes through all the way. It starts here with the so-called columella

separating the two nostrils and it goes back where the nose opens into the throat and there this, the end of this septum is called the vomer. These are anatomical terms.

So you have the septum in between and there you see outlined a couple of air-containing spaces that are those that we call them bubbles over here. It's not very precise, but it is showing the schematics.

This is the so-called ethmoid cell system or the ethmoid sinuses. In fact, there is not one, but there is a number of clefts and cells, it can be up to ten or even more, of the anterior and posterior ethmoid.

Q. Anterior means in front and posterior means in back?

A. Correct. Sorry for using all of these special phrases.

Yes. The anterior-most and the ones further back.

The important thing which is not shown here, but which is crucial, is that the frontal sinus connects to those ethmoid air cells as does the maxillary sinus on either side. This being the way how air can be exchanged from the nose, where

we inhale it in those respective sinuses, and at the same time in the other direction, this being the way where the mucus, which is constantly produced, is actively by the ciliary beat transported first into these ethmoid clefts, which are all hidden under the turbinates, and from there they are transported back to the nasal pharynx, until there is a region where there is no epithelium which has any cilia anymore and there then the mucus is transported down by gravity and the swallowing mechanism, because we swallow the mucus that is produced there.

Q. When you say mucus, for everybody's benefit, that's what we feel going down the back of our throat?

A. We shouldn't feel it. It's normal that it's there, as much as one litre per 24 hours, but if we feel something going there, which we have to swallow upon, this is mucus, the slimy substance which is produced.

Q. What's the purpose of the sinuses, what do they do for us in our body?

A. Well, this is a question very much disputed and I'm afraid to say this is not -- there is no one clear answer. There is a variety of

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hypothesis to what the sinuses do.
One thing is clear.
Q. Let me interrupt you for just a minute. Hypothesis is a theory?
A. It is a theory, yes.
Q. There are lots of theories?
A. Let me first start with the things we know.
Q. Okay.
A. The air which normally we inhale through the nose, unless we run, but normally we inhale our air that we need through the nose, and this air can be dry, it can have a different humidity, it can have a different temperature outside than the one we wanted in our lungs where it ends up.
So the nose humidifies this air. It has sort of a climatizing function. It warms up the air up or should it be too hot, cools it down, so it has a temperature effect. And it catches or there are deposited particles. Not all of them, but many of them, especially the larger particles that the air stream carries with them.
So the nose and the nasal mucosa and that system has an important function in humidification, cleansing of the air and providing the correct

temperature to the air we inhale.
Q. That's what the nose does?
A. This is what the nose does. This basically happens in this region, the turbinates playing a very important part, a very important part, important part, sorry, in there.
Q. Let me ask you this. When we breathe in through our nose, does the air we breathe in go into the sinuses?
A. Not in a direct fashion. We must not have the idea or the concept that when any one of you inhales, that this air goes directly into the frontal in one stream or directly into the maxillary.
There is an exchange, of course, but the nasal, the flow that goes through goes through this part of the nose and there is no active exchange between the air up here, active in the sense that this is promoted by some mechanism.
There is an exchange rate, but this is a fairly slow one. It's more by convection.
Q. What does that mean? If I breathe in or anybody in this room or anybody on this jury takes a deep breath through their nose, does the air that they breath in go directly into your sinuses?

A. If you have not been operated with someone having created a big communication, no. That main airstream that you inhale will go through the nose.
Of course, I apologize, if I do like (indicating)in a forced fashion, this will create some kind of negative pressure, because of the speed, like air that goes over the wing of an airplane, there is some negative pressure which makes the airplane go up or be suspended in air and this negative pressure will take some of the air out of here and then we stop, some of the air goes in.
So there is a change by conviction, but it is not that we inhale directly into one of those major or larger sinuses.
Q. You have talked about mucosa and ciliation or cilia and the lumen. Those are all terms that are medical in nature and I need to discuss with you with the jury what all that means.
I think we have a drawing there of a sinus.
A. Maybe we could start with there only to illustrate what I tried to sketch in a very crude fashion up there.

So there is a more realistic display. This is a cut through a head with the brain up here and here the cut goes through the orbits where the eyeballs are and the eye muscles are around showing the vicinity of the inner wall of the eyes to the system we are talking about.
This, therefore, is the nasal septum that is separating struts between the left and the right side; that may look reversed for you, but when looking on scans or on to a person, the description usually is like you would look on to someone, either into a mirror or on to a picture. So this is the patient's right and this is the patient's left side.
The separation, you can see the inferior turbinate and you can see the middle turbinates, post superior one is not visible on this cut, it would be further in, and here you see the maxillary sinus, of which I told you it's roughly ping ball sized in volume and you see a very, very narrow channel here, which is no wider than one and a half or two millimeters and this is actually where this channel opens underneath this middle turbinate and the mucus which is produced by this mucosa here has actively to be transported up here even if this is

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against gravity in a standing person and it goes around here and then back into the nose.

The air that we are breathing goes through this region, through here and through there (indicating), but the air stream, the direct inhalation does not go like this. So this is what I tried to describe as by convection.

Q. You described the mucosa. What is mucosa?

A. Mucosa is the lining that those cavities have.

Q. Is that like skin?

A. Yes, it is skin, but the difference is whereas skin has a dry outer surface because the cells here are keratinized, I don't have another word for that, I apologize, but you know what I mean, the scales which come on, it's keratinized. This has glands.

Q. Glands?

A. Which produce a variety of viscus or serous products, slime you might call it, and this is a very well balanced system so that the slime or the mucus, which is the medical word for it, which is produced here always has a certain consistency, so that it can be transported.

The transport of that mucus, which otherwise would, it would gather here and remain here, the transport is provided by the cells, by the outer layer of cells, and those cells have tiny hairs, cilia, which push that mucus, not all of it, onward.

So the mucus transport is an active one. Mucus does not flow in our nose or sinuses, it only does so under pathological conditions.

Q. Where is the mucus -- those two big ping pong ball sized openings there are what you called the maxillary sinuses?

A. These are the maxillary sinuses, yes.

Q. What direction is the mucus flowing from the skin or the tissue that lines that opening, which direction is it flowing?

A. Again, there is no flow because flow refers to a passive thing. This is an active transport, and I think we have another chart up here.

This is now one of those sinuses, the maxillary sinus on the right side, and this is one of the findings that Messerklinger came about. There is no random flow or transport, but there is a transport that follows principles which we have

to accept as genetically determined, and for the maxillary sinus he could show, and this has nicely been published, and it's in that book of course as well, that usually this transport mechanism starts at the lowest point of the sinus, at the floor, and then in a star-shaped fashion this transport goes up over the walls of the sinuses and, that's the important thing, always aims for the natural ostium, natural opening of the sinus, and through that it then goes through the channel that I have illustrated on this earlier scheme.

One of the important things for the change of concept in understanding and in treatment was up to then what we would frequently do in cases of chronic sinusitis or acute, we would create a window to that sinus in the so-called inferior meatus, underneath the inferior turbinate, with the idea let the mucus flow out here and together with the pathogens that would help.

It did help in many cases, but at least in equally as many cases it did not help, which showed the frustration at the time and that there should be something new.

We learned if we create an artificial ostium there, that the mucus would bypass this and

still aim for the natural ostium regardless of if this was blocked by something else.

This development or this finding that we cannot deliberately reroute the genetically determined transport routes led to one of the facts that we started to concentrate our looking for the problem of the disease in this region of the ostium and of those prechambers which were in front of those ostia.

I might ask one important thing is the ostium, the opening is always the place from where this sinus developed and that's true for all cells and sinuses in man.

Creation of those sinuses into the bone is an active process, not fully understood, but one can nicely show that in the newborn the maxillary sinus may be that large and then there are lines with age how this so-called #*numatization goes on until when we are about 14, 16, the sinuses, the maxillary at least, has the adult size.

Therefore, this develops from here and it is no wonder therefore that the transport goes to there and that's true for all of the cells. That was one of the early findings that were brought about by Messerklinger's investigation.

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Q. Doctor, we are here about environmental tobacco smoke or second-hand smoke as part of this lawsuit. Let me ask you if you have ever been involved in investigating whether or not cigarette smoke has any impact on the beating or this movement of the cilia?

A. We have been involved directly at our department because Dr. Hoffman and others have been doing studies on effectivity of ciliary beat in cell cultures, that is from patient's cells were taken, put on a culture medium, made to survive there and then a variety of substances were applied in a special chamber to study their effects on the activity of the cilia.

Q. Doctor, what was his name?

A. Hoffman.

Q. Hoffman wasn't just looking at cigarette smoke, he was looking at a number of substances?

MR. HOPPE: I object to the form of the question.

MR. REILLY: I will rephrase the question.

Q. Was Dr. Hoffman looking only at cigarette smoke?

A. No. The basic background for those

studies then were how would several components which are found in many, if not all, almost all nasal decongestants at the time, especially one substance with the name of benzalkonium chloride, which is a preservative, how would this affect ciliary activity as there was and still is considerable discussion would this when used over longer time impair or even totally block ciliary activity.

Q. So Dr. Hoffman was looking at a number of substances and whether or not they had an impact on cilia?

A. Correct. And tobacco was one -- tobacco smoke was one of the factors they and several others investigated, not only at Graz.

Q. So that's been a topic that's been investigated?

A. Yes.

Q. Can you tell me what, if any, results in connection with cigarette smoke and cilia functioning he observed or was observed?

A. Nothing.

You asked for the outcome or the results of this study done by Hoffman and others?

Q. Correct.

You were involved in this research?

A. Not in the performance of the study itself, but being the chairman of this department, all papers before they are, all manuscripts before they go out have to pass my desk and I well went through their results and the publications with them.

Q. What was the result of the work done in your laboratory there in Graz?

A. Well, it showed the most important outcome, if one would use nasal sprays or drops which contain this benzalkonium chloride, this preservative, at a certain level of concentration, not only was ciliary activity slowed down, but once this reached over 50 percent of concentration, was impaired and blocked totally and would not recover. Up to then it would recover.

With the effect to smoke on this, they found that there was an initial acceleration of the ciliary beat, but no deleterious effect, no effect of blocking. But again I have to admit this was an #*invitro study in a model in a tissue chamber.

Q. You said there was an initial acceleration. In other words, they beat faster?

A. Yes.

Q. But no, I think you used the word deleterious effect?

A. Correct.

Q. By deleterious you mean no negative effect, no bad result?

A. In the sense that it would significantly or permanently impair or even totally destroy ciliary action.

Q. Then you said it was then invitro. The study was done on cells not in the human body but that had been taken out of the body?

A. Correct.

Q. Have other scientists looked from time to time at whether or not cigarette smoke impacts cilia function?

A. Yes, there have been studies and there are papers on that and every now and then, even recently, there are papers dealing with this problem. There are not many if you consider other topics that are published on, but they do exist.

Q. If there is a medical consensus on the topic of whether or not cilia are impacted by cigarette smoke, can you tell us what the scientific knowledge is today?

Q. #*doctor, can you advise the jury as to

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what is the state of scientific knowledge today as to whether or not cigarette smoke impacts cilia function?

A. As far as nose and sinuses are concerned, there is no universally accepted opinion. There is no evidence based criterium that would say that cigarette smoke, be it direct or indirect, ETS, second-hand smoke or sidestream smoke, would have an ongoing deleterious effect on the ciliary activity in the nose and the sinuses. This is to the best of my knowledge.

Q. In your opinion, is there an effect of cigarette smoke, second-hand smoke or mainstream smoke, smoker's smoke on the cilia in someone's nose or sinuses?

A. I do not know of any negative effect.

Q. Doctor, let's talk a bit now about diseases of the nose and sinuses and I would like to first talk about sinusitis.

Can you tell the jury what sinusitis is?

A. Well, the term sinusitis, the itis indicates that this is an inflammatory and/or infectious disease, which is characterized by increased secretions by a thickening of the mucosa due to a variety of processes which occur in the

mucosa.

It can be characterized by a partial destruction of the mucosa, at least of the superficial cell layers, and that depends very much on what the causative agent is.

Q. Are there types of sinusitis?

A. There are various categories. You can differentiate sinusitis, number one, by the agent that causes it. There is a viral sinusitis, a bacterial sinusitis, a fungal sinusitis, possibly an allergic sinusitis, that is not so very clear and universally accepted, and there is sinusitis differentiated by the time which resulted in characterization as acute, subacute or chronic.

And, of course, there is another subclassification and that regards to which sinuses are affected.

Q. Let's speak for a moment, you said there were various categories depending upon what was the causative agent?

A. Right.

Q. You also indicated there were time related definitions of sinusitis?

A. This is correct.

Q. Is there a time related definition called

acute sinusitis?

A. There is this entity and it is commonly agreed upon that acute sinusitis describes something which with a sudden onset, reaching the peak of symptoms and disappearing after a longer or shorter period, but which should be definitely shorter than 12 weeks, three months, to zero symptoms again.

So the curve one would draw is going steep up, peak and go down, but it includes with or without therapy it goes back to zero symptoms again for the patient. This would be the clinical course of acute sinusitis.

Q. What are the symptoms that are associated with acute sinusitis?

A. There is a variety of symptoms that can be there. Usually it is accepted that at least the following must be there: The feeling of impairment of breathing, nasal obstruction, increased and pathological nasal discharge, which if it is bacterial can be purulent.

Q. What does purulent mean?

A. That means pus. Sorry, I don't like another English expression, which comes from if you have a bacterial infection, so you have those germs

which enter, which multiply, destroy the tissue and/or provoke an inflammatory reaction which is characterized by certain cells, leukocytes, and those cells die and they give rise to this pus, which is the yellow greenish stuff that in those patients then can be produced when they blow their nose and in there you will find the bacteria and you will find a lot of these dead and still some of the living leukocytes of those cells.

Q. What other symptoms go along with acute sinusitis?

A. The nasal discharge, the pathologic discharge, which can be anterior, out front when blowing the nose. It can more frequently go back of the nose, the so-called post nasal discharge.

There can be the feeling of pressure in the mid-face over the individual sinus. There can be pain, mid-facial pain. There can be headaches. There can be fever.

There can be the feeling of a pulsation, a very unpleasant one. Position of the head can have a distinctive influence, especially when bending forward, patients then frequently have the feeling that that pain is increasing and because the pus, the inflammation, the increased

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vascularization is, again I like the word, you have this pulsation sensation.

And of course there can be complications, especially from acute bacterial rhinosinusitis, which may be very significant as they include abscess formation into the neighboring tissue like the eyes, orbital abscesses, or if the same process goes to the bone or even beyond that at skull base, there may be abscesses in the vicinity of the brain or even at the brain.

Vessels can be destroyed. So there is a vast array of potential serious complications, some of them life-threatening, of acute bacterial rhinosinusitis.

Q. Doctor, does anybody know what causes acute sinusitis?

A. As I mentioned, it is accepted that the two best known and best studied forms of acute sinusitis are the ones that are called viral sinusitis, starting with the well known common cold, and the bacterial sinusitis, which I just alluded to, and very frequently things start with a viral sinusitis, the common cold, and if a person has the bad luck to develop out of that a bacterial superinfection, this may go on into a bacterial

acute rhinosinusitis, which then would be the case to call for an antibiotic treatment of such a disease.

Q. I will get to treatments in just a minute.

You have used the term rhinosinusitis. Is that different from sinusitis or is that the same thing?

A. It is the same thing. However, based on the findings we mentioned earlier, it became clear that rarely there is something like a maxillary sinusitis or frontal sinusitis per se.

We have come to an understanding that most, not all, but most of those sinusitises extend from the nose into the sinuses, and especially with the help of endoscopes and of CT technology, one can clearly show that in the vast majority, and this is well over 90 percent of all of those cases, it is rhinosinusitis, that is, disease of the lateral nasal wall in the nose and the sinuses.

So rhinosinusitis is the preciser term, but it is understood if someone talks about sinusitis, he or she mean the same, but rhinosinusitis is the preciser term.

Q. I think we have a list there of

predisposing factors or causes of acute sinusitis; is that correct?

A. Yes.

Q. First of all, are you the creator of this list?

A. Well, I have added some and as it comes to acute sinusitis, you can find these in many publications, consensus papers and these are there.

Yes, I added some to these, but by no means I am saying that this is a complete one. But it contains the ones which are considered and accepted as most important and there is even, I would say that the order here, the sequence, viral being number one, bacterial, that's okay, then we have not as a cause, but as a predisposing factor, anatomical variations in this very complex situation, say a narrowing of those channels and clefts by just an anatomical variant, which might be due to earlier trauma, for instance, which predispose people to easier acquiring this kind of disease.

Q. Let me stop you right there for a minute.

A. I'm sorry.

Q. By anatomical ostial compromise, the ostial --

A. Is the ostium, as you were pointing, of the maxillary sinus, but this, of course, in analogy would apply to all efferent ducts or prechambers or openings of all sinuses.

Q. We need to talk to the jury about -- if we could use some simpler terms, it would be great.

A. Okay.

Q. You explained a little while ago that all the sinuses connect, right?

A. That is true.

Q. And if I understand you correctly, what you are saying is that if there is a compromise in the passages connecting the sinuses from one sinus to another, that that can be a predisposing factor to the development of acute sinusitis?

A. It can be, yes.

And as on one of these earlier graphs, I tried to show that those sinuses that we all have mostly been concentrating on, the maxillary and the frontal sinuses, are secondary sinuses. They develop out of this complex of the ethmoid, which is in the lateral wall of the nose. They ventilate through that and they drain through that.

And rhinosinusitis just describes the fact that in almost all of the situations of a

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disease up here or there (indicating), you find some disease in those prechambers where those sinuses drain to, where they have their ostial, their openings.

So if these regions are compromised, this is seen and understood as a predisposing factor to sinusitis. It #*musn't cause it automatically, but if it is there, it is understood as a predisposing factor.

Q. How about dental problems, how do they relate to acute sinusitis?

A. This is one of the exceptions where you must not automatically have something in this region up here. If a patient has a dental problem, usually dental roots, it's important to understand that from a number of teeth of the upper jaw, the roots may have a very close relationship anatomically to the floor of this sinus.

It is not rare, therefore, that dental infection problems, granuloma at the root canal, affects the maxillary sinus and results in what then is called a odontogenic maxillary sinusitis, almost exclusively to the maxillary sinus, because this is the only one that has relationships to dental roots.

Q. Pressure changes, barosinusitis, what is barosinusitis?

A. While we are sitting here, we have the same or we should have the same air pressure in our sinuses, in the air cavities as in the environment. If this is not the case, you will feel significant pain.

Think of someone who is trying to dive. He or she needs to equalize pressure before the ears and the same is true for the sinuses.

So there are situations best known in divers, in pilots, where if this equalization of pressure or the adaptation of outside air pressure and air pressure in the sinuses does not work, for instance, because of some infection, inflammation, swelling, so that the pressure exchange is not possible, this may lead to significant acute problems with severe pain which may necessitate a diver well to go up again or a pilot to stop flying or further ascending.

Q. How about you have got cold, dry air. How is that a predisposing or a causative factor for acute sinusitis?

A. Cold, dry air can be an irritant to some people, not to all. It's not well understood why

not to all, but it can be. It is on the list as, for instance, there are some -- this fact is used or this well known fact is used to test some people whether or not they have hyperreactivity. There is a challenge. It's well known from pulmonology. They have a challenge with cold, dry air to see whether or not those patients are susceptible to airway hyperreactivity.

Q. Allergies or allergic rhinitis, I think you mentioned at the outset that this is controversial?

A. This is controversial, but I think to be fair it should be on the list. If someone has an allergy like hayfever, this may well be that during the period that he is exposed to the allergens, the pollen in this case, may experience rhinitis. It is not so clear whether this is for sinusitis, but for the sake of completeness it's put there and that might be seen as a predisposing factor.

Q. You have got ozone. What's the connection between ozone and acute sinusitis?

A. Ozone could be an irritant to the nasal mucosa as well. I have listed this there. It is difficult to take from patients' history. It is there more for the sake of the completeness of this

list.

Q. Trauma, how is trauma related to acute sinusitis?

A. For two reasons. It can cause anatomical compromise, if one of these narrow clefts by the fact of some trauma is narrowed even more, that they have scars resulted from this interfering with ventilation and drainage.

Number two is trauma. Always in most of the cases it goes along with bleeding and the blood which for a while sits in those sinuses is an ideal nutrient to a variety of germs, best known, for instance, streptococci, which can even be cultured on a blotter.

Q. Intubation, you mean when patients are in the hospital?

A. Yes.

Q. How is intubation related to the development of acute sinusitis?

A. Actually this is the number one cause of patients who are at an intensive care unit. When they develop acute sinusitis, a significant number of them do so because they are intubated, that is, they have the air hose that feeds them with air through their nose and this can lead to a

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mechanical obstruction and, secondly, this is something that very frequently results in a secondary infection and you have a colonization of germs, bacteria, and it is the number one cause for acute sinusitis in patients at intensive care units.

Q. Foreign bodies, how are foreign bodies either a predisposing factor or a causes of acute sinusitis in your opinion?

A. Predisposing factor, especially in children, depending upon where they are. One of the standard teachings that you give your residents, if you have a child with acute onset of a usually unilateral sinusitis, of pus, of purulence, always check out for a foreign body, which could be obstructing not only or not just the ostia, but even the entire posterior compartment of the nose.

Q. Doctor, let me switch you to chronic sinusitis and ask you, can you define chronic sinusitis for us?

A. No. Because there is no universally accepted definition.

We ENT doctors do know what symptoms we should see in chronic rhinosinusitis. We have a

definition for the time span. Some symptoms should continue to be called chronic rhinosinusitis. We know there should be mucosal thickening. We know that one of the end stages can be nasal polyposes, massive polyps, for instance. We know there can be post-nasal discharge.

We know that there is some degree of opacification, of shadowing of the sinuses on x-rays and especially on CT scan.

Q. Let me let you finish and then I will ask you to explain some of those terms in simpler terms.

A. Okay.

Q. Go ahead. Are there other signs or symptoms that ordinarily are associated with --

A. Yes, there is the pressure again, which usually is not as massive as in acute. I have forgotten now whether I mentioned the post-nasal discharge. There can be pain. There can be a loss of the sense of smell or impairment. There can be pressure on the eyes, eyes might water. But by and large, these are the key and core symptoms: Obstruction, discharge, pressure, possibly pain.

Q. What's the difference in timeframe for chronic sinusitis versus acute sinusitis?

A. Chronic sinusitis per definition or per accepted definition on the time line should be or must be a minimum of three months of continuing problems with or without medication.

Q. Does that have to occur more than one year in sequence?

A. It can, but from the definition, no. If a person once has the symptoms I mentioned or some of them, and presents with some of the internal and x-ray findings and that goes on for over three months, this is called chronic rhinosinusitis.

Q. Doctor, have you prepared a list of suspected causes and predisposing factors of chronic rhinosinusitis?

A. Yes, I have.

Q. Before we get into these two lists, would you explain to the jury how acute rhinosinusitis differs from chronic rhinosinusitis?

A. Can I go to that other chart again?

Q. Yes.

A. Sorry. This one down there.

Q. I will come back to those two in just a minute.

Doctor, this is a graph or a chart?

A. Correct.

Q. Is this a creation of yours?

A. Actually yes and no. This was published in a consensus paper of an expert group on chronic rhinosinusitis, which was published some four years ago, where the controversy surrounding the topic of chronic sinusitis was alluded to and in there, one of the few things that the participating experts could agree, was the following. I am not an artist, but I try to do my best.

If this is the time line as you can hopefully clearly see, the definition for acute sinusitis, regardless of what's behind this, is it starts at zero problem with the patient and it then goes up very steep, peaks and goes down to zero problems again. This would be acute sinusitis regardless of what's behind it.

Q. Let's go to chronic.

A. Just to make the jury understand, if a patient has another acute sinusitis at some later stage, it might be just the same, and if there are three or four of those episodes, however, with the patient going back to zero symptoms in between episodes, this would be called recurrent acute sinusitis.

Q. Could you have several episodes of acute

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rhinosinusitis in the same year?
A. Of course.
Q. You made mention of the term a cold. Is another term for acute rhinosinusitis, a common laymen's term, a cold?
A. Not necessarily. A cold describes the disease that is brought about by viruses, rhino viruses usually, and we know the best known of this, the standard cold, the flu that we have, and this, if symptoms are there, is always a rhinitis. Rhinosinusitis may develop, but it's always a rhinitis.
Q. How is that different, how is acute rhinosinusitis different from chronic?
A. Okay. Let's say another patient develops chronic sinusitis. The criteria accepted are that this starts usually in a slower fashion, goes up until it reaches some kind of plateau and this plateau continues and it is part of the definition that this plateau must go over three months.
Then we would call this from the symptomatology and the timeline a chronic rhinosinusitis. That could be exacerbations on top of this plateau, it might go a little down or whatever, but basically there would always be a

plateau, and this peak here one then would call and does call acute exacerbation of a chronic rhinosinusitis because the level here is well above the zero symptom line.
Q. Okay.
A. This is basically I think the best scheme to identify the difference in symptom duration and on the time line between acute and chronic.
Q. At the outset of our discussion of chronic rhinosinusitis, you said that there isn't a definition or a biological understanding of what constitutes chronic rhinosinusitis, right?
A. That's correct.
Q. Is there research going on today into what actually is going on in the body when someone suffers what's currently defined as chronic rhinosinusitis?
A. Of course research is going on, because for the ENT community and for the patients, this is a very frustrating situation. You have something you clearly see is there, lasts, a lot of effort goes into medication, where antibiotics don't work so it must be something else, into surgery, not all of which is beneficial to the patients.
The term of chronic rhinosinusitis,

especially if you take polyps with that, is the single most frequently used indication to do something surgically, and we have to admit we don't actually know what it is that we are dealing with.
We have the symptoms, we have the time line, but what really goes on at the level of the mucosa, at the cellular or molecular or mediator level is not very clear, and this is where research goes into.
Q. Are you doing that research?
A. Not that research, but some kind of research because there are various aspects, but one of the research directions which I, our group and Mayo considers very important, we are following with significant effort and intensity.
Q. When you said Mayo, you mean the Mayo Clinic in Rochester, Minnesota?
A. Correct.
Q. What are you and the Mayo Clinic investigating in your research regarding chronic rhinosinusitis?
A. We are investigating the potential fungal immunologic background to chronic rhinosinusitis.
Q. Let's go back for a minute to our board that identifies the list of suspected causes and

predisposing factors. The first one you have there is immunologic; is that correct?
A. That's correct.
Q. Is that what you and the Mayo Clinic are looking into?
A. That is correct.
Q. Can you describe for the jury what your research and the Mayo Clinic's research is about? If you would like to, I think there is a blank sheet over there, a blank posterboard, if you would like to use that in assisting explaining to the jury what's going on in your research.
A. I will try my best. Just a minute.
You have seen all of these, almost 20 or 18 or so different potential or suspected causes, predisposing factors, and usually slides like these come up at international meetings, national meetings when discussion is on what is chronic rhinosinusitis and you will usually read it's a multifactorial issue.
And if we are honest, Matsen always uses multifactorial if we don't really know what is really the one, two or three causes of disease and many of these were taken from a slide that was presented by some American colleague at one of the

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major international meetings here last year.
MR. REILLY: Let's go back, if you would, please, May, to the two lists of predisposing factors or causes of chronic sinusitis.
Q. Doctor, I would just like to go through this very quickly. If you would put them both up.
Now, why have you included all of these items under a heading entitled Suspected Causes/Predisposing Factors of Chronic Rhinosinusitis?
A. Basically to illustrate what I mentioned earlier. We do not know a single most important cause or contributing factor to it all and this is usually with changes in sequence, some more, some less, what someone at any meeting might come up saying chronic sinusitis is multifactorial.
So you would have people allude to anatomic. We talk about those structural changes, viral. There is always the question of allergy, yes, no, abuse of medication, other medications. I mentioned fungus. There are genetic syndromes, ciliary immotility.
There is a whole bag of features that are considered, but it's always in medicine, when you have 20 different options, that explains or means

only one thing: We do not precisely know.
Q. Doctor, in your patient population, do you have people who smoke?
A. Yes, I do.
Q. Do you have people that don't smoke?
A. Correct.
Q. Do you have people who are exposed to second-hand smoke?
A. Yes, I have.
Q. And people who are not?
A. Correct.
Q. How common is acute sinusitis in the world today?
A. Acute sinusitis?
Q. Right.
A. I don't have any precise figures on acute sinusitis.
Q. Let me put it to you this way, Doctor.
A. Chronic is different, but acute, I do not know.
Q. Is acute sinusitis a common illness?
A. Yes.
Q. Does it occur in people who don't smoke?
A. Yes, it does.
Q. Does it occur in people who aren't

exposed to second-hand smoke?
A. It does.
Q. Does it occur in people who do smoke?
A. It does.
Q. Does it occur in people who are exposed to second-hand smoke?
A. It does.
Q. Let's now talk about chronic rhinosinusitis. Is that a common disease in the world today?
A. It is and it is very much on the increase.
Q. It's on the increase today?
A. It is on the increase.
Q. For what period of time to your knowledge has chronic rhinosinusitis been on the increase?
A. Well, I can only refer to the data which have been published, again in your country, by the NIH, to put it correctly, which shows an almost duplication of cases of chronic rhinosinusitis paralleled, by the way, with asthma over the last two, four or five year periods when they come up with the annual reports.
Q. Does chronic rhinosinusitis occur in people who smoke?

A. Yes, it does.
Q. People who don't smoke?
A. It does.
Q. People who are exposed to second-hand smoke?
A. It does.
Q. People who are not exposed to second-hand smoke?
A. It does.
Q. Is that true in your patient population as well as the world population?
A. Sure. I can answer this from my patients, yes.
Q. You said that chronic rhinosinusitis is on the rise. Is that true in the United States as well?
A. These are the data I refer to and I think you aren't the only country where this has been very precisely documented by those figures from the NIH and the latest reports say, because I keep seeing these slides at almost any meeting nowadays, that over 14 percent of the U.S. population suffer from sinus disease, chronic rhinosinusitis, which equal some 37 million patients.
Q. In the United States today, if you know,

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is cigarette smoking and exposure to second-hand smoke increasing, remaining the same or declining?

A. What I understand, smoking is decreasing. I do not have any data to say that exposure to ETS is decreasing, but what I see from my environment that I am in and compare this to 15 years ago, there is considerably less smoke, no smoke at all at any meetings or conferences, et cetera, wherever you go.

Q. Doctor, can you describe very briefly to the jury how viral and bacterial infections spread from person-to-person?

A. The accepted mechanism is that of droplet infection for viruses, that whatever you sneeze or blow into the air or cough into the air can be inhaled by someone else. It can be through direct contact. Most important is finger and hand contact.

Q. In your opinion, does second-hand smoke have anything to do with the spread of viral or bacterial infection?

A. Not to my knowledge, no.

Q. Let me ask you whether or not environmental tobacco smoke or second-hand smoke in your opinion is annoying?

A. I don't know it is, but it can be. For instance, I am annoyed by tobacco smoke.

Q. Is it an irritant?

A. It can in some people definitely be an irritant.

Q. In your opinion, is it a cause of either acute or chronic rhinosinusitis?

A. Not that I know of.

Q. If someone walks in a room that has smoke in it and they complain of symptoms like their nose runs or they have a congested feeling or they have watery eyes, do you have an opinion as to what is going on in that person?

A. We usually place reactions like these, entering from a clean air room into a room filled full of smoke or from hot into the warm and -- into the cold and whatever, under the term of a vasomotor rhinitis, which is a different thing from a sinusitis, and it is a reaction to irritants which is brought about, according to our current understanding, by irritation, triggering of special receptors that we have in the nasal mucosa, and these receptors, once irritated, and that can be by direct pressure, it can be thermal, chemical irritants, do two things.

Number one, they send a signal towards the brain via the nerve fibers, the so-called afferent path, and this signal mediates pain, and that's what these receptors are meant to do.

At the same time these receptors, when irritated, with the same action potential, may trigger other fibers which reach in the mucosa blood vessels, glands, smooth musculature, et cetera, and the effect of this may be a vascular dilation, that is increased blood flow, there may be leakage of plasma from the vessels, something that is called the neurogenic edema. There may be a smooth muscle contraction, not that much up here, but in the chest, for instance, and there may be even, if the substance which mediates all that goes free into the tissue, which it does, and that is substance P.

This can cause some cells to degranulate, mast cells and basophils, and so without the advent of any allergen we have some cascades of the allergic event, of the histamine cascade.

So the patients will react with watery nose, with impaired breathing because of the mucosal swelling. There might be itching and sneezing due to these factors released and there

may be pain.

Q. Doctor, is it the same as acute rhinosinusitis?

A. No, this is a totally different mechanism.

Q. Is it the same as chronic rhinosinusitis?

A. The same answer as before.

Q. Does it go away when you leave the room in which the irritant is located?

A. This is one of the criteria to be something like that to be called vasomotor rhinitis.

Q. Doctor, in your opinion, based on your 25 years of research, practice, surgery, diagnosing, treating chronic rhinosinusitis, does second-hand smoke or environmental tobacco smoke cause or contribute to the development of chronic rhinosinusitis?

A. I have no evidence of this.

Q. The same question for acute rhinosinusitis. Does cigarette smoke, second-hand smoke play any role in the development of that?

A. No.

Q. Have you ever diagnosed anyone who in your opinion developed acute or chronic

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rhinosinusitis as a result of exposure from second-hand smoke or to second-hand smoke?
A. No.
Q. Doctor, in your opinion, based upon the state of science today, in your opinion, can environmental tobacco smoke cause chronic rhinosinusitis?
A. No.
Q. Doctor, I just have one or two more questions for you.
Previously we had up on the easel a couple of charts indicating what were either suspected predisposing factors or suspected causes of chronic rhinosinusitis.
Is exposure to second-hand smoke a predisposing factor for the development of chronic rhinosinusitis in your opinion?
A. Again, I'm not saying it is a good thing. I don't like tobacco smoke, I don't like to be in it. But I have to stay honest and say that based on my experience and what I know from literature and from many discussions, the answer to that is no.
I know that there are reports and that things have been investigated, not very widely, and

there are some controversial reports, but given the facts if I look to evidence-based medicine, there is no such thing as a smoking induced chronic rhinosinusitis and I think this is reflected if you look through the references of many of the papers where they deal with, are trying to sit over a consensus on chronic rhinosinusitis. Smoking, not only to me, to many others, appears not to be a major issue that they consider important or see that it contributes.
Q. Is that true regardless of whether a person has allergies or any other of the predisposing factors that are listed on your board?
A. I'm not saying in an appredictive way, there is nothing that smoking could contribute to use symptom wise, say if you have an allergy, or let's talk the other way, if you have a chronic rhinosinusitis and on top of that irritated by smoke, yes, of course, if you enter an environment, a room where there is smoke that may add symptoms or a degree of annoyance.
But at the same time I have to state a sinusitis, a chronic rhinosinusitis induced by or maintained by smoke exposure, no."
(Videotaped deposition stopped.)

MR. REILLY: That is the end of the direct, Your Honor.
THE COURT: How long is the cross then?
MR. REILLY: I understand that the cross is 2 hours and 30 minutes.
THE COURT: Cross is two hours and 30 minutes?
Okay. Do you need to take a break now?
Okay. The jury will go to the jury room. And then I just want to talk to the lawyers about our schedule.
(Jury exits courtroom.)
THE COURT: The total for the cross is 2 hours and 20 minutes? Okay. Let's see. And how long is -- obviously, that's the most we'll accomplish today is doing that. Then we've got the other person. Dr. Ogden. How long is that one?
MR. ENGRAM: I don't know. I haven't seen the tape, Your Honor. I'm concerned about the Court's ruling with respect to Dr. Ogden, and something that you allowed the Plaintiffs to have played --
THE COURT: We're obviously not going to play Dr. Ogden today, so I'll hear you about

that. But we don't know how long it is about?
MR. REILLY: I don't think you're going to go until 8 or 9:00.
THE COURT: No, I'm wondering how much time on Monday it's going to take.
MR. REILLY: Are you going to bring them back on Monday?
THE COURT: Remember we said if there was some left over evidence that we would do that Monday morning. Then I said that Mrs. French could testify again, too. There will be at least that, both of those witnesses for Monday.
Now, I do need to know how long the tape is of Dr. Ogden so I can figure out what time, how we're going to do this on Monday.
MR. ENGRAM: Your Honor, the tape hasn't been delivered to me. I know that TrialGraphics came over with the final edits on the direct during this. So I'm assuming that it's not ready yet.
THE COURT: See if you can get some idea.
MR. ENGRAM: Okay, I'll make a phone call and find out.
THE COURT: This is what I'm thinking.

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Actually what I'm thinking is this. Maybe on Monday morning we could have our charge conference. I don't know. It depends how long this is. We could either go ahead and have Dr. Ogden and Mrs. French on Monday morning, although that could only be until about 11:30. Or we could do it in the afternoon, later in the afternoon. It's the middle of the day that I can't be here.

MR. REILLY: Your Honor, let me make a suggestion.

THE COURT: Okay, but we have to have closing on Tuesday.

MR. REILLY: I'm going to talk to Jonathan and see if we can't just eliminate Dr. Ogden all together so that we can put all the evidence on today. And I would like to discuss with Your Honor whether or not there is such as thing as rebuttal.

THE COURT: I'll hear you on it again briefly, but I have given it some more thought. And you weren't here this morning when I mentioned that.

Well, if you're going to eliminate Dr. Ogden, then we could finish today. And

then have the charge conference some time on Monday, I don't know.

MR. REILLY: Right. I thought the original plan was to end the evidence today, do the charge conference on Monday and bring the jury back on Tuesday.

THE COURT: Right. Except if there was more evidence. So why don't we have a 10-minute break, you decide what you want to do about Dr. Ogden and that might answer this question. But we still have two hours and 20 minutes, which is okay, we can do that today, especially if it's the end. And even if Mrs. French is allowed to testify, it's going to be very brief because it's just going to be on this one very limited subject.

MR. WEINSTEIN: Less than 30 seconds.

MR. REILLY: One thing, Your Honor. When is the endoscopic examination supposed to have occurred? Do we know that?

MR. WEINSTEIN: Well, I have to talk --

MR. REILLY: Just ask her.

MR. WEINSTEIN: I'm not going to do that right here and now. I'm going to ask her, but we're not going to do it in front of her.

MR. McCUE: Can we depose her?

MR. WEINSTEIN: Before the operation, as I understand it. As I understand, before and after the operation.

MS. FRENCH: Once it was healed, there were several, something that you don't -- you remember.

MR. REILLY: All I want to know is are they before, after or both?

MS. FRENCH: I said one was before the operation and there were several after.

MR. REILLY: Then, Your Honor, I think we're just going to have to have an argument about it.

THE COURT: Okay, well, you know, I'll hear you on that. Let's have a 10-minute break. But it's important to know what you're going to do about Dr. Ogden's, because that will affect our schedule the most.

(A recess was taken.)

MR. WEINSTEIN: Judge, I just thought maybe you might say something along the lines that through no fault of either party, that this tape will end for the day and, but it will take us to about quarter to 7:00.

THE COURT: Let me figure out what's happening, then I'll figure out what to tell them.

What did you decide about Dr. Ogden?

MR. ENGRAM: Your Honor, the tape, they're still working on it. They said that it won't be ready until this weekend, that they just completed the additional edits on the cross. But I think that, I mean, in light of the Court's ruling, I know that, Your Honor, you said you were letting it in because of bias, but I think in light of the Court's ruling, we will withdraw Dr. Ogden as a witness.

THE COURT: So that would mean that all we have is the rest of this tape and Mrs. French's very short testimony. But what I'd like to do in that case then is tell the jury that the rest of the cross examination of Dr. Stammberger will take about two hours and 20 minutes and then very brief testimony.

I'll hear you if you have anything to say about that. But I'd like to conclude the testimony today. Then what I would do would be, I guess, to tell them that they would have

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Monday off while we have our charge conference and the closing will be Tuesday morning.
So what did you want to say further? Let's make it real brief, though, because if we go today, it will take a lot of time.
MR. REILLY: Your Honor, rebuttal testimony is designed --
THE COURT: I'm sorry to cut you off. I know what rebuttal testimony is designed to do. And I had some question about whether this was rebuttal. And I think it's really only in a very broad concept of rebuttal that this could be considered rebuttal. But whether it's considered rebuttal or reopening their case for this short testimony, I think under the circumstances it would probably be appropriate to allow it. And that's what I decided to do.
Of course, you can, obviously you can cross examine on this. I don't know what else you want to say.
The issue that I'm considering rebuttal about is whether there was an endoscopic examination of Mrs. French.
MR. REILLY: Your Honor, my

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expectation -- first of all, I have the testimony where I examined Dr. Persky on whether or not he had done endoscopic examinations of the plaintiff after her surgery. He basically said he thought he had, although he hadn't billed for it. So I don't know how it could be rebuttal from that.
THE COURT: Well, it's not rebuttal from that.
MR. REILLY: I know it, that's what I mean. The topic was discussed with Dr. Persky. The Plaintiff's testimony followed Dr. Persky's. So the issue of whether or not he had done an endoscopic examination came up, it was addressed.
I don't know how it could be argued that it would be rebuttal now when it came up with the very first witness in the case.
My second concern -- so it isn't really rebuttal because the issue was already on the table on the very first witness.
And my second --
THE COURT: I guess that involves a question that you just brought up, whether it was before or after the surgery. I don't know

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if you addressed the questions of Dr. Persky only in regard to after the surgery.
MR. REILLY: I did. I have the transcript.
THE COURT: I don't remember specifically what Dr. Torres said about before and after.
MR. REILLY: There was a discussion by Plaintiff's counsel as to what the examination, only had two examinations before the surgery. They were discussed in detail by Plaintiff's counsel with Dr. Persky. He described exactly what he did with the patient. He did not describe using an endoscope.
I'm also concerned what this is going to be is another opportunity for the Plaintiff to get on the stand and say how difficult this was and how incredibly painful it was and to try to engender in the 11th hour, 59th minute and try to, quotes, in rebuttal, engender sympathy for her in what was an uncomfortable experience, rather than merely: Did he do it or did he not do it?
All that is is an effort at establishing damages for the Plaintiff rather than did he

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do this examination or not?
THE COURT: What would you want to ask? Just whether the examination occurred and when it occurred.
MR. WEINSTEIN: Yes, Judge, what he conveniently omitted was very simple was when he put on Torres in their case, they kept on saying --
THE COURT: Please, answer my question. What is it that you intend to ask Mrs. French?
MR. WEINSTEIN: Just whether or not she was examined by Dr. Persky with an endoscope and when approximately was it? And that's all she's going to say.
She's going to say, you heard her, that yes, before the operation I was examined and after he did it two or three times, it's something you wouldn't forget. And that's the end.
THE COURT: So if that's all she's going to say about that.
MR. REILLY: She's going to say, Your Honor, I'll never forget it, I couldn't forget something like that.
MS. FRENCH: Because it hurt.

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MR. REILLY: See.
MS. FRENCH: You don't forget that.
MR. REILLY: This is an opportunity at a damage claim, not merely was doctor -- all that Dr. Torres said was I didn't see anywhere in the records where he marked that he did an endoscopic examination. In fact, that's exactly what Dr. Persky said, so I don't know what we're rebutting.
MR. WEINSTEIN: He kept on saying --
THE COURT: I agree it's a close question. But I'm going to allow her to testify. It could pose a problem for Plaintiff because of some other things that happened, but it's up to them. There's a lot of area for cross examination that you have with this, I think.
MR. REILLY: Your Honor, are we going to go into how painful it was and how uncomfortable it was and I'll never forget it?
That's not an attempt of identifying whether Persky did it or not, that's an attempt to try to get this jury to award damages. And that's not rebuttal.
THE COURT: I agree, it depends -- I'm

cautious here about saying too much of what I think about this and how various things could come out to give any -- don't know what your cross examination would be.
MR. ENGRAM: Your Honor, the problem I --
THE COURT: If the thrust of your cross examination -- see, I don't know. Do you intend to cross examine?
MR. REILLY: It depends on what the Plaintiff is permitted to say. If the Plaintiff were permitted to say, I recall having an endoscopic examination on my first visit or my second visit and I remember having an endoscopic examination on my first post-op visit or my second post-op visit. And that's all she were permitted to say, I don't know whether we would cross examine her or not.
THE COURT: If you don't cross examine her, if you don't cross examine her, then I don't think I will let her talk about the pain. Because the only thing about the pain would be if you were challenging whether was it true and how can she remember it and that kind of thing. You know what I'm saying?
MR. REILLY: I may well challenge whether

it's truthful, but not in cross examination of this Plaintiff. But that has nothing to do with whether or not she gets on the -- clearly this isn't rebuttal by any stretch of the imagination. This is a person who wants to get on the stand and bolster her own physician's testimony.
THE COURT: I think she could have been asked about this before. I agree she could have been asked. And probably she should have been asked about this before. But it doesn't appear to me that, although that's not the point, I guess, but I don't think that it's an opportunity -- I won't let the Plaintiff use it as an opportunity to go into how painful this was or anything in regard to her damages claim.
I mean, she's of course here and listening to all this conversation and participated in some of it before, but if she's simply asked did she have the examinations and when it was, and she says yes, she had it. And, you know, I remember it because it was painful or something like that, that's the extent of it.

MR. REILLY: Why does she have to be permitted to say, and I remember it because it was painful?
THE COURT: Only if you're going to -- if there's a challenge about whether it happened or not or whether she remembers it or not.
MR. REILLY: You mean if I'm going to get up and cross examine her and say, are you sure you remember?
THE COURT: Well, I doubt you would say it this way.
MR. McCUE: Is the Court saying you would limit to -- her answer would be limited to, yes, I remember it before and I remember it after.
MR. WEINSTEIN: I think she would say something like, it's something you wouldn't forget and that's the end of it.
MR. TROP: Judge, as a matter of fact, she distinctly, 100 percent remembers telling Dr. Torres that Dr. Persky had done it because Dr. Torres --
THE COURT: Okay, so, and I think they'd be allowed to ask that question.
MR. REILLY: What question is that?

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MR. ENGRAM: About comments she had to Dr. Torres? We have a transcript of that IME, Your Honor, it's not in the transcript of the IME.

THE COURT: Well, then can you use it.

There's a transcript of her whole examination by him?

MR. REILLY: Yes, they insisted on having a Court Reporter present.

THE COURT: So if she wants to insist on saying she said it and it's not in the transcript, that's a problem for her.

MR. REILLY: Your Honor, what this is is a reopening of the Plaintiff's case. There is nothing that has happened that causes the Plaintiff's case to be reopened.

THE COURT: I agree it's a close question. I think that I'm going to allow it. But you know, depending on what she says, I would allow further evidence from the Defendants about this.

MR. REILLY: But what would the evidence be, Your Honor?

THE COURT: The evidence would be the transcript of this IME, for example.

MR. REILLY: I mean -- there is no --

THE COURT: Is there a transcript of the IME?

MR. REILLY: Sure. Do I have it here in this room? I don't know.

I need a minute, Your Honor, because this is --

THE COURT: Can we go ahead while you're going that doing that, at least let's start playing the Stammberger stuff.

I'm going to have to move along on the Stammberger tape.

Could you get the jurors, please?

Do you have the transcript of the testimony of Dr. Persky.

MR. REILLY: Yes, ma'am. Yes, Your Honor.

THE COURT: And what about the transcript of her testimony?

MR. REILLY: I've marked both the portion where the Plaintiff examined -- excuse me.

MR. WEINSTEIN: Judge, usually the Court rules and that's the end of it.

THE COURT: I want to see it, though. I asked for this.

(Jury enters courtroom.)

THE COURT: Okay. Have a seat.

You heard that the remainder of this video is over two hours, actually two hours and 20 minutes. It's 4:30. Whatever that would be, around 7:00.

I'd like to proceed. I know it's very late. But this will conclude most of the testimony, maybe there's going to be a little bit more and maybe there isn't. We're having some other discussions about it. But it's our hope to finish the testimony if we can today.

If there's anything in addition, it might be a short amount on Monday, but the closing we're still planning for Tuesday. So let's at least get through this. I hope it's not a big inconvenience for the jurors to stay that much later. I don't know if you had anything to eat other than your coffee, but we still have a few cookies left. Unless that's a real problem for anybody, I'd like to proceed that way. Okay? Okay. Let's turn it on again.

(A bench conference occurred as follows:)

THE COURT: Could I look at the -- do you have the transcript of Mrs. French's

testimony?

MR. REILLY: I'm looking at it right now, Your Honor. I'll give it to you. I'm highlighting the portion where she talks about the examination.

THE COURT: After you read it, I'd like to read it.

(The bench conference ended.)

(Videotaped deposition of Heinz Stammberger, M.D. was played as follows:)

CROSS EXAMINATION

"BY MR. HUNTER:

Q. Doctor, I have the bills here that you have sent to the tobacco lawyers. I will hand them to you. I didn't see in there that you had billed them for any time to do a literature research. Is that true?

A. No, I have not billed for that, no.

Q. So you have really done nothing since being hired by the tobacco companies to research what's in the literature concerning tobacco smoke, second-hand smoke and health issues?

A. That's what you deduct from these bills, but this does not say I didn't do research.

Q. So you did it, but you didn't bill for

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it?
A. Not extra. I billed for my time. I never specifically mentioned what for. It's for my time, whether that's spent with literature or for a deposition like this.
Q. Go ahead. Don't let me interrupt you.
A. No, no, that's okay.
Q. You did put on your bill what your time was spent doing?
A. Yes.
Q. It was in meetings with tobacco lawyers?
A. That is correct, yes.
Q. So you didn't put anything in there about researching the literature. What you are telling me today under oath is that you have done a literature review?
MR. REILLY: I object to the form.
A. Yes, I looked through literature. I continuously update myself on the literature and I have --
Q. I am talking about second-hand smoke. Please, go ahead.
A. I looked through literature and I did not state this as an extra detail in my bills to the lawyers.

Q. Why not?
A. Why should I? It was part of my time that I spent.
Q. Why did you put meetings with lawyers and not put research of literature, why would you put one and not the other?
A. I don't know. I didn't give that a thought, but I looked through literature.
Q. What literature did you review?
A. I made Medline researches, some of them as recent as in the last days, to update me especially on allergy and tobacco, because I am -- I mentioned that I was very actively engaged in our own allergy department, but I am not so anymore in the last years as I have different tasks and I had Medline research on the topic of tobacco and allergy to see if there are things that are new or essential.
Q. So when your deposition was taken on November 9 of 2001, you hadn't done this literature review, you have done it since?
A. This one for allergy, no, but this one I have done and I mentioned then already that I went through the literature that was provided to me by the lawyers.

Q. So the tobacco lawyers provided you literature. Did you think that that was a representative collection of the literature on second-hand smoke?
A. No, not necessarily.
Q. You probably assumed that it was the literature which was favorable to the tobacco industry?
A. I did not assume this because this was the same literature that from the depositions I was given to read before. These were exactly those four or five papers which were alluded to in all of these depositions.
Q. Did you bring any of this literature with you today?
A. No. I have these five papers. I do have that, yes.
Q. That's the tobacco lawyers' documents?
A. Exactly, right. I have nothing else on me today.
Q. How about this literature review that you have done since your last deposition, did you bring any of those articles?
A. I had these faxed to me yesterday or the day before. I have these, yes.

Q. Where are they?
A. They are here with me in my luggage.
Q. Could you get them for us?
When did you do your Medline search?
A. This was, the date should be on it. Yesterday or the day before. Just to update, but this is on allergy.
Q. How did you do your Medline search if you were here in Miami?
A. The head of our department of allergology at the ENT hospital did it for me. I was on the phone with her.
Q. So other than that, you have done no literature review other than what the tobacco companies sent to you?
A. Not since the last meeting at that deposition at Graz.
Q. You certainly wouldn't hold yourself out as having specialized in the area of second-hand tobacco smoke?
A. No, I would not.
Q. Do you know what components are in second-hand tobacco smoke?
A. I do not know in detail, but some of them I know, yes.

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Document from the Tobacco Industry Documents Website www.industrydocuments.ucsf.edu/docs/mqjl0001

Q. Essentially your opinion on whether second-hand tobacco smoke causes sinus disease is really based on your clinical practice?
A. Right, seeing many patients, thousands of them who were exposed and others who were not exposed to smoking and all having the same kind of disease.
Q. Your testimony is that in all these thousands of patients that you have seen, you have never had one tell you that when they went in to a smoke filled room, that it caused them to get a runny nose or burning eyes or difficult breathing?
A. I did not say that. I said I have not seen one in whom this would contribute or cause a rhinosinusitis.
Q. Let me ask you if you remember this question in your deposition on November 9, 2001:
"Q. Do you have any patients that have ever presented to you that say after being exposed to cigarette smoke, that they develop a runny nose or a cough or a headache?
"A. No, not that I would recall."
Do you recall giving that answer to that question?
A. I must have answered this if it is there.

Q. So your testimony to this jury is that in your entire experience as a doctor, you have never had anybody tell you that after being exposed to cigarette smoke, they had a runny nose, a cough or headache, that's your testimony?
A. This is not my testimony. I don't know in which context this is. I have seen patients with vasomotor rhinitis that I have alluded to this morning and clearly there are patients who responded with watery nose or stuffy nose after entering a smoke filled room, but these were not the ones with chronic rhinosinusitis.
And even the questions before, we were talking about chronic rhinosinusitis, then the answer to this connection would be no, but I have seen patients who have symptoms after being exposed to smoke.
Q. You are not here to say that exposure to cigarette smoke cannot be a potential cause of chronic sinusitis, are you?
A. Can you please rephrase the question again? I am not here, I am here to say?
Q. Are you here to say, Doctor, that cigarette smoke can not be a potential cause of chronic sinusitis?

A. This is my experience and my knowledge.
Q. Based on the fact that nobody has ever complained to you, according to your deposition testimony at least, that being in a smoke filled room caused them to have a runny nose or a headache?
A. Not in the context with that person having chronic rhinosinusitis and I have not seen the exposure to smoke make any difference on the diagnosis, on the treatment and on the cause of the disease whether or not the patient was exposed.
Q. Your patients never complained to you that they had been bothered by smoke?
A. With chronic rhinosinusitis, by and large, no, at least not to such a degree that I would have considered this a major or contributing factor.
Q. Let me ask you if you remember this question in your deposition on November 9:
"Q. Are you here to say, Doctor, that cigarette smoke cannot be a potential cause of chronic sinusitis?
"A. I didn't say that.
"Q. Well, that's what --
"A. Because I don't know. "

MR. REILLY: Could I have the page number?
Q. "And I think no one knows."
Page 157.
"But what I am saying is up to today" --
157 and 158.
"Because I don't know and I think no one knows, but what I am saying is up to today there is no scientific evidence of this. I would be the most happy person in the world if I leave this room and know what the reason for chronic rhinosinusitis is."
My question is simply did you give that answer to that question?
A. I did.
Q. Is that true?
You would be the most happy person in the world if you leave this room and you knew what the reason for chronic rhinosinusitis was?
A. This was in a rather relaxed atmosphere, but basically yes, this is true. By this I alluded to the fact that as of today, in that complex thing we call chronic rhinosinusitis, many are searching for explanations, but there is no one major factor, as I said this morning, that we in an accepted

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fashion can call the cause of chronic rhinosinusitis.

Q. When you said that, as of today, you hadn't done any sort of a literature review other than to read the articles that the tobacco company sent to you?

Correct?

A. And read what I usually would read and do read on chronic rhinosinusitis.

Q. How much time have you put into the case since the deposition?

A. I do not know, but if one counts the hours that I have listed, this is pretty much about it. Plus some extra hours for which I don't bill because I think it's a normal thing that I read through materials and put time on. But basically it can be seen from the bills where I charged for the hours that I was active in there.

Q. Maybe you can tell us again, how did these lawyers contact you?

A. As I mentioned, I assume, I don't know, that they first contacted someone from Mayo and for whatever reason, Mayo didn't want to speak out and so they asked me would I be willing to meet them, to listen to them and then depending upon what my

impression is, make a deposition yes or no. And I answered okay, let's meet and then we met.

Q. But other than after your deposition, which was on the 9th of this very month, other than to read what the tobacco industry had given you, you didn't do any specific research on second-hand smoke and its relationship with human disease?

A. But I have seen some 20,000 plus patients with the disease in question and I have treated them and I have come to the conclusion, and again, I never said that smoking is a good thing or ETS would be a good thing, but to stay on the scientific basis that I have, there is no evidence for ETS, at this time, in 2001, being one of the contributing causes let alone the sole cause for what we call chronic rhinosinusitis.

Q. "Smoke from cigarettes is also an irritant to many nonsmokers and worsens allergic conditions. In such concentration, second-hand smoke may be harmful to those with certain kinds of chronic illness. New research suggests that long-term exposure to second-hand smoke may seriously threaten the health of nonsmokers."

Do you agree with that?

A. Basically, yes.

Q. Let me just look at your charts.

We have two of these. These are suspected causes of chronic rhinosinusitis and you have got one, two, three, four, five, six, seven, eight, nine, ten and there are probably ten other causes on the other board; is that correct?

A. This is correct.

Q. Don't you think it's a little suspicious that of all those 20 causes of chronic sinusitis, as it relates to flight attendants who worked in a smoke filled environment year in, year out, that you didn't consider that maybe their exposure to second-hand smoke could be a cause of their chronic sinusitis?

A. Smoking has been discussed and is discussed in this matter. I have no evidence that it does contribute in a sense that it causes chronic rhinosinusitis.

I have earlier this morning explained how as an irritant, a chemical irritant, a thermal irritant, it might produce what we call vasomotor rhinitis, symptoms of which can be very annoying, but this then is not chronic rhinosinusitis.

Q. What if a flight attendant gets symptomatic every time she is on a long smoking

flight?

A. Could -- I'm sorry?

Q. And it becomes chronic in that she develops a chronic sinus disease.

A. This is hypothetical and we do not have any evidence that this is the case.

Q. But you haven't looked at the medical records of any of the flight attendants involved in this lawsuit, correct?

A. This is correct. I was not asked to do so.

Q. Let me ask you this. Did you ask the tobacco companies or their lawyers to give you the studies that they have conducted on environmental tobacco smoke and what it does to people?

A. No, I did not.

Q. Why not?

A. I didn't know whether those studies performed by the tobacco industry were there or would be present. I mean, was the tobacco industry, which I understand of course the tobacco industry is behind that, but I don't see myself as someone who is giving testimony for tobacco industry.

I have been asked my opinion, my clinical

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and scientific experience to the very question chronic rhinosinusitis, is smoking one way or the other, especially ETS, a substantial causative factor to this disease, what is your experience, what is your knowledge.

Q. Did you read the Surgeon General's report?

A. I did not read the Surgeon General's report, but I am aware of the negative statements as regards to smoke exposure.

Q. Do you smoke?

A. I don't smoke.

Q. Do they smoke in your hospital?

A. They did until we moved into new hospital one and a half years ago, a new building and there, of course, smoking is not allowed, but there is a smoking room like in many of these institutions in Europe.

Q. Chronic sinusitis is a very bad disease to have, isn't it?

A. The intensity of symptoms may vary, but those with massive symptoms, to those it can be a very annoying disease, yes.

Q. It can make life miserable?

A. In the extreme form, yes.

Q. And surgery doesn't always work?

A. It does not always work.

Q. Then again in 1986 there was a report of the Surgeon General and in that report there was a major chapter called The Health Consequences of Involuntary Smoking. Are you familiar with the specifics of that particular article?

A. Not the specifics.

Q. Are you a member of the American Academy of Otolaryngology?

A. I am not a member.

Q. What are the requirements to be a member?

A. I actually do not know.

Q. Are the people that you deal with and lecture with, are many of them members of the American Academy?

A. I don't know this in detail, but some will be I assume, yes.

Q. Would you agree with me that some of those -- well, first off, are you aware of the fact that there are certain educational and experience requirements that are necessary to be allowed to become a member of the American Academy?

A. I contributed to their educational program, provided videotapes on surgical techniques

and others there without being a member.

Q. Are you aware that some of their colleagues, some of these 7600 board certified American Academy of Otolaryngology members may disagree with some of your theories with regard to fungal sinusitis?

A. Of course. They should. Because this knowledge is not yet widespread.

Q. I'm going to come back to allergies probably later, but you would agree with me again, among your colleagues there is a dispute as to whether tobacco smoke acts as an allergen?

A. Parts of things, to phrase it carefully, that are in tobacco smoke or at least in the tobacco leaves apparently can act as allergens and give rise to IgE mediated reactions.

Q. I'm going to turn to the fungal thing in a minute, but when you went through your list of causes, you said it was very controversial about allergy.

A. Chronic rhinosinusitis, not allergy affecting the nose.

Q. Right. You make a large distinction between those two disease processes, A, an allergic process and chronic rhinosinusitis?

A. On the investigational basis, yes, because what we see in allergies, even in long-standing allergies, are changes of the nose, the nasal mucosa, much lesser though of the sinus mucosa where the allergens apparently do not reach as readily as the nasal -- as on to the nasal mucosa.

Q. Would you agree with me that an allergy is not one of the major causes which is routinely associated with chronic rhinosinusitis?

A. There are several studies out on this and what can be said is that patients who have chronic rhinosinusitis can, in a moderately higher percentage, be found to test positive for allergies in their skin test, but not necessarily clinically are positive to this.

On the other hand, patients, the percentage of positive patients where you clearly find actual positive allergens in patients with chronic rhinosinusitis does not significantly differ from the distribution of allergy positive patients in the normal population.

Q. I would ask you to tell me, maybe chicken egg if you can, what you think those, how they each deal with each other in the case of chronic

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rhinosinusitis.
A. Chronic rhinosinusitis, this kind of we are talking about, is an inflammation, which can be aggravated by an infection, be that a viral one, be that a bacterial one.
Q. Okay.
A. But the basic, the underlying problem is an inflammation in the mucosa and what our group at Mayo is showing is that apparently this process leading to the inflammation starts not in the mucosa, but in the mucus.
There is some evidence that it might be a systemic disease, which occurs where fungus works as a trigger, innocent fungus that we all have.
Why this is the case and leads to the disease in those people, no one is able to say. Not yet. This is where the research is.
And maybe I am allowed to state this. I am not saying this is true for all and everything, but this is where our research is at at the moment showing what an incredibly complex situation that entire field is of chronic rhinosinusitis.
Q. I understand itis means the inflammation, but can you get inflammation from an infection?
A. An infection will result in many cases in

an inflammation because as an inflammation we describe the changes in the mucosa, in the tissue that is brought about maybe by trauma, maybe by infection, but in this case it is not infection that starts it, because the fungus does not go into the tissue. It's no invasion. It's an immune reaction, an inflammation.
Q. An inflammation itself, because it changes and tears down tissue, can become a breeding ground, for lack of a better word, for bacterial infection?
A. The inflammation itself --
Q. Yes or no?
A. Not. There is no one answer to that. There is no one answer to that.
Q. You can either say yes, no or there is no one answer, but I need to know.
A. I can't give you a yes or no. There is a lot in between, unfortunately.
Q. Go to the word obstruction and explain how that works in the process of chronic rhinosinusitis.
A. Two sides to that. Number one, what the patient feels and would tell you. I can't breathe. My nose is blocked or breathing is impaired. The

other would be the objective finding, that you really can prove there is less air that goes through.
Obstruction results from an impairment of the space to breath through, usually by engorgement, thickening of the mucosa, whether this is vascular, reactive, vasomotor, inflammation or infection. So the patient will have less air to breath.
There is another meaning to obstruction. If this obstruction occurs at critical regions in the lateral nasal wall where all of these openings and the canals come together, this may effect the ventilation in those sinuses and it may effect the possibility that the mucus is cleared through this region.
Q. While you are looking for an immunological cause for this disease process, wouldn't the professors at Gentz in Belgium, Cauwenberge and Bachert?
A. Bachert, yes.
Q. They are looking at it more from the obstruction is what causes the disease process?
A. No, not exactly. They are looking for the underlying problem what leads to the swelling,

the inflammation, and their basic topic is now the so-called superantigens to staphylococci, which are a certain breed of bacteria in the nose, which many of us have.
Q. You defined for me when we last conversed at your deposition, you defined for me an irritant as "Something which affects in a negative sense the well being of a person by causing either a symptom or basically people annoyed or dislike the substance." Do you remember saying that in your deposition?
A. Yes.
Q. So if someone is asymptomatic or has no symptoms before he or she is exposed to smoke and finds that they have symptoms, temporally, at the time they are exposed to smoke, you would say those people have been irritated by cigarette smoke, would you not? Yes?
A. Most likely, yes. If this is clearly due to their exposure to smoke, then this is the case.
Q. In the case of persons who had no symptoms of the type that they had when they were exposed to smoke on a routine basis, and by that I mean flight attendants who were exposed to smoke for hours and hours and hours at a time in the

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cabins of aircraft, you would agree that those people would be prime candidates for being susceptible to cigarette smoke as an irritant if not to the extent that it causes chronic rhinosinusitis, you would agree with that?

A. I can't give, again, one yes or no answer. It would depend on the individuum, on the individual person, whether or not she or he would be irritated by if I smoke. Not everyone is.

Q. Am I correct in stating that your current written questionnaire does not ask the patient whether he or she smokes?

A. I don't ask patients anymore routinely because I have seen over all these decades that it does not make any difference to the disease, to how I should treat it and what the outcome is, so I don't ask them anymore.

Which doesn't say we don't talk about smoking if word comes on or patients start, but I do not routinely investigate whether or not this patient is exposed to ETS or a smoker him or herself, though you will smell it automatically when they come in and then I will take my notes, but I do not routinely ask for that anymore.

Q. So your opinion would be that those

physicians who do ask for that today, it would be a superfluous question in their questionnaire?

A. No, they might use it for other things, statistics, whatever, but when it comes to chronic rhinosinusitis, I have arrived, based on my experience, at the conclusion it does not make any significant difference.

Q. Whether your patient ever smoked is not a historical fact that you deem significant?

A. Not for sinus disease. That would be totally different, and I am seeing those patients as well, when it comes to cancer of mouth, oral cavity, larynx, hypopharynx.

Q. Dr. Stammberger, my name is Phil Gerson and I would like to ask some follow-up questions. I will try not to repeat what the other lawyers have questioned you about, but there are some issues that they went into that I would like to explore a little further.

First of all, dealing with Mr. Hunter's questions, tell us how it was that you actually were first contacted to become involved in this case.

A. Again, through one of my assistants, senior staff members, Dr. Braun, who happened to be

at the Mayo Clinic at Rochester. I received notice that would I be interested to be contacted or willing to be contacted by some lawyers in regards to chronic rhinosinusitis.

Q. So Dr. Braun was in the United States and he contacted you and told you that he had been asked by lawyers for the tobacco companies to make an approach to you?

A. It was not said that these were lawyers for the tobacco company. He approached me when he was back from his trip, back at Graz, and told me personally and asked me personally could he communicate to Jens Ponikau at Mayo that I would be willing to be contacted by the lawyers. This was the way it was.

Q. Virtually all of the involvement that you had in the case to earn whatever money you have earned up until this point came about as a result of meetings that you had with lawyers representing the tobacco companies; is that correct?

A. Yes, the time that I have dedicated, I billed per time or time segments that I spent.

Q. The bills are all for meetings in Philadelphia, Los Angeles and Austria between yourself and lawyers for the tobacco companies; is

that correct?

A. That is correct.

Q. Well, your focus in the work that you have done in sinusitis has primarily been on surgical techniques, correct?

A. Based on what we know or thought we know or knew at that time on chronic rhinosinusitis. That led to the development of the surgical technique.

Q. The book that was brought in to be representative of your expertise deals with endoscopic sinus surgery, correct?

A. This is correct.

Q. In fact, you told us about your background with the other doctor who actually was one of the pioneers of using the endoscope to do sinus surgery?

A. Messerklinger, this is correct.

Q. And then you have not only written this book, but you have written numerous articles and the focus of your articles have been upon the continued development and improvement of endoscopic surgical techniques for sinus surgery?

A. And on chronic sinusitis.

Q. But you have never published anything on

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the effects of cigarette smoke on sinus disease, have you?
A. This is correct.
Q. You have never received any grant to study the effect of cigarette smoke on sinus disease, have you?
A. I have not.
Q. You have never done any research to investigate the effect of cigarette smoke on sinus disease, correct?
A. There have been others at my department mentioned before, Dr. Hoffman and coworkers, but I personally have not done specific research in this regard.
Q. What you did tell us about Dr. Hoffman's research is what you have been told about Dr. Hoffman's research, correct?
A. What I read.
Q. You have not participated in the research yourself?
A. I have seen it happen. By the way, I forgot to mention this. There is a scientific video on this experiment out as well.
Q. So what he has done is extracted cilial cells?

A. Correct.
Q. From cadavers?
A. No, no, no, no, from patients.
Q. From living patients?
A. Who did not have sinus disease, but had other operations like tonsils and adenoids. When they were under general anesthesia, they have been informed biopsies have been taken from various areas of the nose and the ethmoid sinuses.
Q. These cells were exposed in the laboratory?
A. Correct. Tissue culture was grown and under invitro laboratory conditions these cells, the ciliary beat was measured and the cells and the culture was exposed to a variety of substances, among others smoke.
Q. As you explained in some detail this morning the function of the ciliary is to remove the mucus. It's a transportation system to rid the sinuses of the mucus and to expel it through the odia --
A. To the ostium, correct.
Q. That is a cleansing function that the cilia are performing, correct?
A. This is correct.

Q. And the only observable effect that you are able to testify to of smoke on the cilia is that when exposed to smoke, the cilia responded by speeding up or moving the smoke faster than the cilia responded to smoke-free mucus?
Q. Is that correct?
A. This is one of the results of this study.
Q. So would it appear to you that the cilia is telling us something, that the cilia is telling us that we don't like smoke and that when exposed to smoke the cilia begin to move at an accelerated rate to evacuate or get rid of the smoke?
A. Many other substances were shown to start with an initial acceleration as well. I have no way to ask the cilia and I put stress on the fact that this was shown in an invitro model, so we do not know how and to what degree we can transpose this to the invivo, to reality.
Q. But it would be a common sense interpretation of that laboratory observed fact, would it not?
That the cilia are moving, moving faster because this is a noxious substance that is offensive to this human tissue?
A. This is a hypothetical.

Q. I believe you did say that there was no other observed effect on the cilia from the exposure to smoke, at least that you were aware of.
A. Correct.
Q. But that does not mean that a long-term repeated exposure of cilia to smoke does not cause significant damage to the cilia, does it?
A. In this experiment, they were not able to come to a state where ciliary movement was impaired to a degree it would not recover, quite in contrast to the application of those other substances investigated, especially the benzalkonium chloride.
Q. So when we even in a short-term expose the cilia to a harsh chemical like benzal --
A. Konium chloride.
Q. That caused damage right then and there?
A. In a high concentration. I think I mentioned before 50 percent. Yes.
Q. But this experiment was conducted over a relatively short period of time compared to a flight attendant's being exposed to smoke over 20 years, wouldn't you agree that's true?
A. I would agree, and again, this is an invitro experiment and the background was then not to consider what might have happened in someone who

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is exposed longer, it was planned to find out whether or not there are any detectable and possibly deleterious effects to ciliary activity, just that, with certain substances, among these smoke.

Q. How long was the exposure to smoke?

A. I do not recall exactly. For this I would like have to look up the paper.

Q. How long was the whole experiment?

A. I don't know either, but this went on for weeks and on a repetitive scale, but it would simply not be honest if I gave you now a guess. Those data are there, but I don't have them with me. I don't recall.

Q. But it didn't go on for 20 years?

A. No, not really.

Q. It didn't go on for ten?

A. It did not go on for ten years.

Q. Or five or one?

A. It did not go on for five. It did not go on for one year.

Q. It was, as you said, weeks?

A. Correct.

Q. So there is no reliable scientific inference that can be drawn from the fact that the

cilia, once the stimulus of the smoke was removed, did not appear to have any lasting effects?

A. If you say it that way, this is one of the hypothetical conclusions.

Q. In fact, when you were asked, you said that you were unaware of any other study of the effect of smoke on the cilia in sinuses?

A. Which would show that it comes to a permanent impairment of the cilia there.

Q. There are cilia in other parts of the upper respiratory tract, correct?

A. Correct.

Q. They are in the bronchial tubes?

A. They are.

Q. And those cilia are substantially similar to the cilia that are in the sinuses, are they not?

A. From their morphological aspect they are, yes.

Q. And you are aware of a considerable body of science in the United States that shows that there is a permanent and a harmful and an irreversible deleterious affect on the bronchial cilia from exposure to cigarette smoke, correct?

A. I do not know the papers in detail, but I am aware of the overall negative effect of smoking

on the mucosa in the trachea and the bronchi.

Q. Can you, off the top of your head, from the study done by Mr. Hoffman or Dr. Hoffman, I suppose it is, give us any reason why we should believe that the cilia in the sinus passages, being similar to those in the bronchial passages, would react differently to a long-term exposure from smoke?

A. I never said that I have evidence for this. On the other hand, I always stated, and I do it again, that I do not have evidence that the cilia in the nose react like this. So my knowledge, there is no proof, no evidence based study showing this.

If those results would come out and be proven by a series of investigations, for instance what was recommended today, following the criteria of evidence based medicine, I might well switch, but what I am saying is there is no evidence at all that exposure to tobacco smoke brings about this kind of inflammation which as a constant feature one encounters in the nasal and sinus mucosa of patients with chronic rhinosinusitis.

Q. And you can't offer us any explanation as to why those issues would behave differently in

response to smoke than bronchial tissue would?

A. Correct.

Q. You did say, to use your words exactly, that I would recognize tobacco smoke as a chemical irritant, tobacco smoke can be irritating. I don't like it. And you were referring to what you called a different type of sinusitis.

A. Vasomotor.

Q. Vasomotor?

A. Rhinitis that is.

Q. Rhinitis.

A. Correct.

Q. So you were able to even explain when we met the last time in some detail what the pathologic process of how someone's being exposed to cigarette smoke causes irritation and it results in pain?

A. Correct. This was the model of the orthodromic impulse, which is, as I explained earlier, receptor in the nasal mucosa, if triggered, sends one action potential up certain fibers which end up in the brain, giving the impression of pain, but the same action potential by the same stimulus will cause a reaction in the mucosa, engorgement, vascular dilation, exudation

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of plasma, itching, sneezing, et cetera. Vasomotor rhinitis, which is very different from chronic rhinosinusitis.

Q. So in simple English, you would agree that if someone blows smoke in your face, it is going to cause a pathological reaction in at least some people that is experienced as pain and discomfort?

A. At least in some people. It is not predictable, and whether that's pathologic, no one knows. Maybe that's a defense mechanism in people who have a special way to react. We do not know.

Q. Well, you said, did you not, that in the nasal mucosa, the polymodal receptors become irritated and feel pain and that is transmitted to the brain and that this irritation hurts?

A. Correct. This is published in one of the papers in the United States. I think it was a supplement to the Annals, however, when we explored the mechanisms of pain as they relate to nasal and sinus symptoms.

Q. And you also said that it would cause people to have watery rhinaria and to sneeze?

A. It may. It must not, but it may. That's among the group of symptoms.

Q. In some people at least?

A. Some people apparently react like that to a variety of stimuli.

Q. So what you say is that the chronic rhinosinusitis is a different disease from the vasomotor sinusitis?

A. Rhinitis. Rhinitis. It's vasomotor rhinitis. Yes, this is different.

Q. Even though you don't know what chronic sinusitis is?

A. I nor anyone else, I guess, knows what chronic sinusitis is. Very clearly alluded to, we don't exactly know the pathophysiological mechanisms behind the disease, the clinical symptoms of which are clear, the morphological changes in the mucosa of which are clear.

We can clearly tell it is different from vasomotor rhinitis, but I said we do not know what causes chronic rhinosinusitis, and I have listed a bunch, sorry for this awful word, a bunch of factors which are being discussed and I pointed out three different groups of research trying to get closer and to a better understanding, and that's the Bachert group, this is the cystic fibrosis, and this is what we are doing.

I never said that we have the one and only clue. I just reported on where we are and how for some apparently this moves to somewhere to a better understanding because many clues come together.

Q. Didn't you say, using your exact words, "I don't think we have a good understanding of this disease."

A. That's just what I said.

Q. Didn't you say, "It would be unfair to say we know what chronic sinusitis is."

A. Exactly what I tried to express right now.

Q. Didn't you say, "We don't even know whether it's one disease and all these desperate attempts to come with classifications prove that we are lacking a 100 percent clear understanding of what chronic sinu -- of what is chronic sinusitis"?

A. The same answer as before.

Q. "No universally accepted definition is regards to what is really happening at the level of the mucosa on the cellular level because this is where the problem is that we see"?

A. Correct. And what I alluded to all of this morning, the first common denominator, it's

agreed upon, to be there in chronic rhinosinusitis is the eosinophil, which apparently has nothing to do with IgE mediated allergy, and our research, why the fungal immunologic line gives some more evidence that this may be one of the trails leading to it.

I am not saying this is it and all other ENT doctors have to eat that. Not a second. But we are just very carefully trying to come up with our results. They will be published in 2002, Mayo's and ours, and there will be more discussion and that's the way of how research is.

But with all -- sorry, really sorry, with all that, and that's the problem that I have, I am not saying I know the one and only answer, but with all that variety of research here and there, how we can come up and say ETS exposure is it, if there is no true proof, no evidence based finding for it, I can't do that.

Though I am not saying with a word that smoke is good for everyone. I am a nonsmoker. I dislike it. But to stay fair and to what I see published, what I see in thousands of patients, I have to come up with, whether this is for or against tobacco industry, I do not care at all, but

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I would like to say straightforward, with science that there is no evidence that smoking or ETS exposure causes what the international community sees as chronic rhinosinusitis. No more, no less.

Q. So the evidence is that based on what you told Mr. Silver about your own experience flying is that it ruins your clothes, but not your nose?

A. You like short answers: yes.

Q. And the long answer to what causes it is that list of 20 things that you put up on the two charts over and over again?

A. There may be many more. I am not saying that this is nearly complete. There may be something that comes somewhere in the future and if they would -- yes, that's it. I can only --

Q. At least 20?

A. At least 20, yes.

Q. Dr. Stammberger, I gather that in your experiences, you have said, having treated 20,000 plus patients with chronic sinusitis, that you must know what all of the symptoms of that disease are?

A. I think I know the spectrum, yes.

Q. Probably you know what all of the problems are that that disease causes in the lives of patients since you have seen so many people who

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have been affected by this?

A. I am not saying that I have come across any of those one can think of, but by and large, I think I have seen them, yes.

Q. I wonder if we could maybe make a list of what those things are and, if you wouldn't mind, if you would just write those things on the blackboard here or the chart, and I will hold the chart steady to help you.

Some of the things you have already mentioned and let's just see if we can get a word or two for each of these on the board if we could.

I think the first thing that you told us about is that people have pain?

A. This definitely was not one of my first statements and pain in chronic rhinosinusitis can be there. It is not a standard feature. It can be there as the feeling of pressure in the mid-face, between or behind the eyes, but when it comes to chronic rhinosinusitis, pain is not the first leading symptom.

I mentioned this for acute, but not for chronic.

Q. I wasn't asking you to put them in any particular order, but is that one of the things

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that people with chronic rhinosinusitis complain to you about, pain?

A. I would not list them as -- this as the first or most frequent symptom, but yes, it can be around.

Q. Why don't you put it somewhere down in the middle of the board there and then you can put the others that you think are more common starting at the top.

So without my suggesting them to you, why don't you just give us your own list of some of the things, some of the problems that are caused to people that have chronic rhinosinusitis. Is that the correct word, equalization?

A. Go on with minor things or leave it with those as major things?

Q. Well, let's see. You have listed I think 13 things. Why don't you read us what you have listed?

A. Okay, nasal obstruction. Impairment of breathing. A post-nasal or anterior nasal discharge. Discolored discharge. Loss or impairment of sense of smell. Episodes of acute exacerbation. Pressure feeling between, behind the eyes. I might add watering of the eyes, but this

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is for a different reason. Problem with pressure equalization. Pain. Middle air ventilation problems. Glue ear. Hoarseness. Sore throat. Asthma. There could be recurrent infections, colds in the nose.

Virtually this list is endless if you go to the individual problems, but I think the major features I hope I have listed there.

Q. How about headaches, you mentioned headaches this morning?

A. Well, we talked about pain. The true headache, if we differentiate that from mid-facial pain, is a different story. It can be there if certain sinuses, especially the sphenoid sinus, are full and if they are involved in the disease. Then headache, yes. Otherwise, headache must not be one of the standard features of chronic rhinosinusitis. Can be.

Q. Our TV commercials talk about sinus headache here in the United States. Is that something that's connected with this disease process?

A. Well, more with acute than with chronic. However, if you have problems with pressure equalization, you dive or you go up in an airplane

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or up a mountain and you can't normalize the pressure in here, this can be extremely painful.

Q. And that can be because somebody has their sinuses clogged because of this chronic disease?

A. Not if the sinuses are full with everything, but still when the sinuses contain air, but the passways into the sinuses are for whatever reason blocked or narrow, it is then that the air in there is trapped and cannot adapt to the -- like you have it in the ear in a diver, to the pressure in the vicinity.

Q. So let's just talk about how some of these things actually effect people in their everyday lives. First you say nasal obstruction. That means that your nose is blocked and you can't breath through your nose?

A. Yes. That is right. And there is a very interesting phenomenon that some of the first symptoms a patient will describe if they have a minor lesion only somewhere in the lateral nasal wall, in those ethmoid sinuses, is the subjective feeling of I can't breath. Despite if you do some testing with rhinomanometry or rhinomanometry, you might still see air go free through the nose, but

the patient has the feeling I can't breathe. But if this becomes massive there is definitely a measurable nasal obstruction, which everything will become dry, which might lead to sore throat and hoarseness, et cetera.

Q. So then it affects the voice too, right?

A. It can. Hoarseness, yes. Voice, okay. These are not constants, but may well be.

Q. Someone who has nasal obstruction is trying to blow their nose all the time?

A. Which is a beautiful way of blowing things into the sinuses and making them participate into the problem, which would not be possibly the natural cause of it.

Q. So the natural response to the disease is to do things that actually wind up making it worse?

A. Maybe for the individual case. I don't know natural, but yes, if we blow our nose, and this can nicely be shown if you blow it in here, you might press pathogenic material into the sinuses where it might, again, it might, lead to more problems.

Q. Now, the impairment of breathing, the impairment of breathing would have an effect on somebody's ability to carry out physical

activities, correct?

A. As long as or insofar as this is massive, that this person would be a mouth breather exclusively, yes.

Q. So doing heavy labor or participating in sports would be limited or impaired by somebody who had nasal obstruction to the point where the breathing was impaired?

A. Correct.

Q. Now, you say post-nasal anterior discharge. That's either a runny nose or the mucus dripping down the throat?

A. Correct.

Q. Giving you the feeling that you have to clear your throat all the time?

A. Your nose, yes, and the throat, correct.

Q. Now, the discolored discharge, that's something that our natural instinct is to want to expel somehow, is that so?

A. I don't know whether it's the natural instinct. I have put it there to differentiate this from the natural discharge we have. We all produce about one litre minimum of mucus, of slime in this system per 24 hours.

Q. But those of us who don't have chronic

rhinosinusitis feel no need to spit it out?

A. I would doubt this as an absolute statement. There are unfortunately enough people who come with post-nasal discharge as their leading symptoms and we don't find anything in there. So there is more to that.

Q. How about the loss or impairment of the sense of smell, that's something that's directly related?

A. To certain forms of chronic rhinosinusitis. We did some work on that as well. It appears to relate, number one, to the mass of mucosal swelling and/or polyps that go along.

If these block mechanically or physically the olfactory ridge, because the mucosa in which there is the sense of smell is a very small area, only high up in the nose, and if access to this is blocked, the ability to smell may go down and this appears to be related mechanically to the mass of swelling and polyps and on the cell layer to the amount of eosinophils in the mucosa and possibly on the mucosa as well.

Q. How about the sense of taste, is that affected too?

A. In an indirect way it is. As a routine

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from the patient who comes and says "I lost my sense of smell," they will automatically add "and my sense of taste."

Then you have to explain that it is not the sense of taste that they have lost, but if any one of you gets the impression coffee when drinking it, this impression is mediated to our brain by roughly 80 percent via the sense of smell and only 20 percent by the sense of taste.

We as human beings have a relatively poor quality of the sense of taste. If the sense of smell now is impaired or totally gone, for which there are a variety of reasons, all that remains are those 20 percent of taste being there to identify what you drink, et cetera.

This is why people say "I lost my taste," which is not true. They are with the level of taste which we have, which is not nearly as good as some animals do or some of our closer relatives.

Q. So then by having this disease, someone's sense of taste can be affected by up to 80 percent?

A. No. The taste is not affected.

Q. But their experience of the taste is affected?

A. This is a false conclusion that the

patients come up with. The taste remains the same 100 percent, but those 100 percent only are 20 percent, roughly. That would give you the information now this is coffee.

Q. So then a person's ability to enjoy their life by eating foods that are pleasing in taste --

A. Right.

Q. -- would be reduced by this?

A. Correct.

Q. And chronically over a lifetime, that could be a substantial loss of the ability to enjoy life?

A. Correct.

Q. In fact, wouldn't you agree just in general with the statement that just some, not all, but just some of these symptoms in any particular individual's life would have a significant and a substantial impact on their ability to enjoy their life?

A. Especially if it comes in complications, yes -- sorry, in combinations, yes.

Q. Under the third item you have on the top list there, the post-nasal and the anterior nasal discharge --

A. Yes.

Q. Does that include what you called earlier the glue-like mucus or the peanut butter in the nose?

A. It may, but usually this is not the case. Those patients who come with the post-nasal discharge PND syndrome can be found in the group with massive chronic rhinosinusitis, but must not.

There are patients who come with post-nasal discharge symptomatology without having any evidence of any chronic or acute sinusitis at all.

Q. If we could sit back down, I have just a couple of more questions and I will be finished.

Do people with this disease have to make changes in their life-style beyond what I have already discussed with you?

A. Again, there is no one answer that would cover it all. Let's assume you have someone who is very active as someone who is doing sports, who is a diver. Chances are that he or she could not go on to free dive or SCUBA dive because they wouldn't get, without any therapy, a pressure equalization up there. Someone who would do field and track and running really or marathon might not be able to do that.

With standard physical activities, unless this would be associated with asthma, yes, there can be impairment, they might have to adapt, but of course there is the possibility of therapy.

Q. What about climate?

A. I think I know an answer. I just was trying how to put that together.

In general we know that a very warm or humid climate may not be a good thing, like you would have in the tropics, for instance.

On the other hand, we constantly hear and see that people who travel to the seaside, where they inhale the salts which are in the air from seawater, et cetera, report that they are getting better and the conclusion is that certain salts, and industry takes advantage of that, which are in the air at sea, for instance, have the ability to split the mucus, there are certain disulfide bridges holding together the molecules of the mucin and making that very thick.

If these are split by this air, mucin gets thinner, patients have it easier to get rid of this and they get he better symptomatically. So climate has or can have a decisive factor. Not as a routine, but there definitely are places where

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people would feel better.
Q. So people who have this disease would be restricted in the spectrum of climates that would be best suited for coping?
A. Not necessarily. I'm not saying that they can't live where they want, but from many you hear that while I was at seaside, I felt better or the recommendation is should I go up to the mountains to the clean air or should I go to the sea, that we say from experience try the sea. Most likely you will have more benefit from this.
Q. Finally, by changing climate, by medical therapies, by surgery, is sinusitis curable?
A. Some forms of sinusitis definitely are curable. This was one of the great successes of this endonasal technique and some others that one was able to make mucosa of the sinuses return to normal, to turn patients back to asymptomatic with new surgical techniques.
However, and the lesson we learned was -- let me rephrase that. I was told when I initially started sinus surgery, you must take out all of the mucosa of any given sinus because this mucosa, as it is thickened, is irreversibly diseased, and we believed that.

With this technique we saw that the potential of mucosa to recover, to go back to normal is much, much higher than we had thought before and this is why that kind of surgery was labeled, not by me, by someone from the United States, Functional Endoscopic Sinus Surgery.
However, at the same time we learned that not all diseases can be cured, not all stages of chronic rhinosinusitis, which in the end led to the research that I have been talking about earlier, and the question is why don't all cases get better, assuming that the quality of surgery is done to the same degree of care, et cetera, and perfection as it should be, and the things that I tried to list is we slowly start to understand this is a very complex thing with an immunologic background and what we are approaching in those cases where surgery would improve the situation, but not cure it, is not the disease itself, but we are approaching or we are removing reactions to the disease.
So we can't cure an immunological problem with surgery alone. We can improve it and this is why many, if not most, of those patients do depend on additional medication like, for instance,

topical steroids, which have brought about a big change in the quality of life of those patients as well.
Q. So for the patients in whom the disease is not cured by surgery, they are medication dependent for the rest of their life?
A. No. Again, you can't say it with this distinction. There may be some patients who need an internal therapy and it's not possible to predict it for the individual case. Some patient might need two or three episodes per year where they use three weeks of a nasal spray. Others, especially those who have asthma, might be constantly dependent on this therapy.
So this varies individually.
Q. If an individual has vasomotor rhinitis, what happens during one of these episodes to the cilia?
A. Basically they sort of swim or beat in the increased watery secretion which is there and they may not be able to touch to that mucus blanket on top and to transport it in a correct fashion. This is why the nose runs, the mucus doesn't stick anymore, but they continue to beat, we have to assume, because we can't watch them during such a

phase when the patient is sneezing, et cetera.
Q. Have you heard the term cilia paralytics?
A. Yes.
Q. What is that?
A. These are -- you refer to substances that can cause a paralysis?
Q. Yes.
A. In cilia?
Q. Yes.
A. Yes.
Q. What happens then if the cilia are paralyzed?
A. I can't tell you in detail, but the biochemical mechanism that makes those tubals slides against each other and cause the movement is impaired with, so the cilia activity first is impaired and possibly totally interfered with if a complete paralysis is achieved.
Q. What would happen to the mucus flow if the cilia is paralyzed?
A. If you have a total paralysis of all cilia in this entire field, there would be no directed active transport of the mucus. There would be, to use your words, mucus flow. It would follow gravity. The air that we inhale, so follow

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hydrogen and aerodynamic principals.
It would still go to the back to some degree, but in a much lesser coordinated way from some areas most likely or possibly it would not be transported away any more like the major sinuses, maxillary.
Q. That's because the opening where the mucus leaves those sinuses is on the top in essence?
A. Almost correct. In a standing person that would be the case. It might change when they lie down because then that ostium of the maxillary comes to another level."
(Videotape stopped.)
(A bench conference occurred as follows:)
THE COURT: It's 10 to 6:00 and I can't take this for another hour and I don't think the jury can either. It's just too much to go through. And when we finish that we still have the issue of Mrs. French. So that would be like 7:00, 7:30. I just don't see how we can do it.
MR. REILLY: I move to strike the remainder of his cross examination.
THE COURT: I'd like to grant it,

especially listening to it. And, boy, if you don't think that the Plaintiffs have gotten the advantage of having the deposition taken this way I think you're wrong. To me it's clearly an advantage to the plaintiffs that all these Plaintiffs lawyers were there to cross examine and stuff.
However, that's not an issue right now. I just don't think it's fair and I just think it's too much. What we could do is, there's about an hour left of this.
MR. REILLY: An hour and 20 minutes.
THE COURT: I thought it was two hours.
MR. ENGRAM: I think it's about an hour left.
THE COURT: If we start at 9:15 on Monday and Mrs. French who is going to be short. I have to leave here by 11:15, then I could be back here for our charge conference in the afternoon.
MS. WEINSTEIN: There were a couple of small issues with exhibits that we haven't resolved either.
THE COURT: Anyway, I think it's better to do that way.

MR. WEINSTEIN: I agree judge, I've had it.
THE COURT: I'll discuss with you in a few minutes about Mrs. French but I'll lets the jury go.
(The bench conference ended.)
THE COURT: I really have decided that it would be better not to push on for another hour of this now. I don't know how you all feel, but it's a little difficult.
So the option is the lawyers and I have some work to do on Monday and we were going to take a good part of the day to do that. But if you come back in the morning on Monday, it will just be a fairly short morning from your point of view. And then I'll do my other work with the lawyers about the instructions that I will give you, I'll do that in the afternoon. And then we'll have closing on Tuesday.
I'm going to excuse you for the weekend. Please be here again, you've been so prompt. If you be here 9:15 on Monday, we'll have about two hours or so with you and then we'll excuse you for the day and then you'll come back on Tuesday for the closing.

Please do not discuss the case with anyone, of course, you're permitted to go wherever you'd like over the weekend, but don't discuss the case and we'll see you on Tuesday morning. Thank you very much --
JUROR: Monday morning.
THE COURT: Thank you, Monday morning.
(Jury exits courtroom.)
THE COURT: What about if we had a proffer of what you're going to ask Mrs. French.
MR. WEINSTEIN: Sure.
THE COURT: Right now. Then we'll know. Then you'll have to stick to the proffer so everyone will have knowledge of what it's going to be.
We had a little bit. You don't have to take the stand, but we are assuming that you're under oath.
PROFFER EXAMINATION
BY MR. WEINSTEIN:
Q. Ms. French?
A. Yes.
Q. Do you remember Dr. Persky at times using an endoscope?

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A. Yes, I do.
Q. And approximately how many times and when?
A. I recall it was prior to the surgery and then I know once my nose was healed it was after the surgery. And I'm not really sure on another time, but I believe it was around or prior to my CAT scan, I think, in '95.
Q. Is that the same type of instrument you saw here that Dr. Torres pulled out?
A. Oh, yes.
MR. WEINSTEIN: I have no further questions.
MR. REILLY: Why don't you just read that to the jury on Monday morning?
THE COURT: Is there any objection to doing it that way?
MR. WEINSTEIN: I think she should say it.
THE COURT: Assuming that she's restricted to that?
MR. REILLY: Then we have no variables, why don't you just read it.
THE COURT: But she can say it. As long as that's exactly what would be said.

MR. McCUE: Your Honor, if I could, in looking at some of the cases where in the broad discretion of the court they've allowed situations such as this to allow in questions of fact which have omitted. Those were typically in their documents and specifically two cases in a PI case they were interrogatory answers that were proffered at the close.
So I think that that would be more consistent with prior holdings where they have allowed this sort of matter to happen.
THE COURT: You know, since that's exactly what would be asked and it takes about half a minute, I really don't see the problem with doing that. Especially since we're going to be here anyway for the rest of this testimony.
Assuming that's the testimony, do you Defendants know if they'll have any cross examination?
MR. REILLY: I don't know for sure, but if that were the limit of her testimony, we might not.
MR. WEINSTEIN: I'll make sure, no problem.

THE COURT: We can have this written up here so we'll know exactly what it was. I think that's fine. She can be asked those very questions.
Okay. So if we finish this up on Monday morning and then Monday afternoon probably around 2:30 or so we'll meet for the charge conference.
Do you have your charges, by the way, prepared?
MR. REILLY: We do, Your Honor, but I don't know if Plaintiff does.
MR. WEINSTEIN: I think we do.
THE COURT: Have you exchanged them?
MR. REILLY: No.
MR. WEINSTEIN: I'll come here earlier with him.
THE COURT: Well, I think it would be good if you could exchange them now so you could look at them over the weekend.
And I will want them to be given to the jury in writing, too, when we go over the charges on Monday afternoon someone will have to get them in written form for Tuesday.
So if you could exchange them and also

each give a copy of your instructions to me and your verdict forms, I think that might save a little time.
Now, will there be anything else that you have to do? Because I can't do it Monday morning if it's later than 11:15.
MS. WEINSTEIN: I'm sorry?
THE COURT: What else did you have to do.
MS. WEINSTEIN: The interrogatory answers about market share. I've given -- we talked about that before. And we redacted the years before 1976, but I understand counsel is still not satisfied with I guess the way they were redacted or something else. And we want, I guess we need Your Honor to be involved with that for some reason.
MR. ENGRAM: I thought we had agreement with Reynolds. There was a blank answer to number 3 or something like that and you were going to take that page out. That was the only problem I had.
Do you remember what we talked about?
MS. WEINSTEIN: Yes, but Philip Morris and Lorillard and Brown & Williamson.
MR. McCUE: The only issue, two matters,

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if they're entering these for the purpose of market share there's one answer, market share, which is right there. But then they also have another answer to Interrogatory number 4. I believe it is all of the brands that Brown & Williamson had made, which goes on for two or three or four pages. I don't know that that's really essential for the purposes they're putting these in.

THE COURT: I'll let them put it in if it's accurate. If you don't have have any problem with the accuracy.

MR. REILLY: Judge, the problem I have with it is the interrogatory answers list a whole bunch of brands that have not come up in this case for any reason. Never identified by the Plaintiff, never identified in this case. So I object to it. There is no identification of these brands. They're not relevant to this lawsuit.

MR. McCUE: Can you only --

THE COURT: What is the Plaintiff's position?

MR. TROP: That's what we're doing with the interrogatories, it's evidence.

THE COURT: You're showing that these brands were manufactured by the Defendants?

MS. WEINSTEIN: One of the witnesses said that she saw most American Brands.

THE COURT: I'll let it in.

MR. ENGRAM: You're going to take out this page 14 from Reynolds? I want it out, I don't want the interrogatory in there.

MS. WEINSTEIN: We can take it out right now and just restaple it. Let's make it easy.

THE COURT: How are we doing with the instructions?

Don't the Defendant's have one set of instructions?

MR. REILLY: Yes.

MR. McCUE: There are just some modifications of it.

THE COURT: This doesn't have to be the final, final. Obviously we're going to have our charge conference.

Where are the Plaintiff's instructions? Do you have them?

MR. TROP: Mr. Weinstein was really in charge of that. I think we got a final draft, but at this very moment I don't know where

they are. Maybe we could get a contact number over the weekend and fax them.

MR. REILLY: You don't have your instructions?

MS. WEINSTEIN: Our instruction point man just went downstairs for a minute.

MR. REILLY: We can fax them to one another over the weekend.

Your Honor, would you like ours now?

THE COURT: I would. I would like them.

And does that include the verdict form, too?

MR. REILLY: Yes, it does.

THE COURT: So we'll meet on Monday and finish this up with the jury.

MS. WEINSTEIN: Judge, I just need the Philip Morris and Lorillard exhibits so that we can complete this process. I've been trying to do this for three days.

THE COURT: Do you have the Philip Morris and Lorillard brand thing?

MS. WEINSTEIN: I've got Brown & Williamson and Reynolds, but I'm having --

MR. REILLY: Don't you have your own of these? Or did you give us your own?

MS. WEINSTEIN: No, I don't have the exhibit for the Court.

THE COURT: We'll make a copy if you need it.

MR. REILLY: This is over our objection.

MR. McCUE: And over Brown & Williamson's objections for the same reasons regarding brands weren't identified and they were not in evidence.

THE CLERK: That's Plaintiffs' Exhibit 1 composite.

(Plaintiff's Composite Exhibit 1 was marked in evidence.)

(Trial adjourned at 6:05 p.m.)

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